LEASE NO. GS-05P-LWI00685
BUILDING NO. XXXXXX

INSTRUCTIONS TO OFFEROR: Do not attempt to complete this lease (GSA Lease Template L100, hereinafter Lease Template). Upon selection for award, GSA will transcribe the successful Offeror's final offered rent and other price data included on Offeror's submitted GSA Lease Proposal Form 1364, (hereinafter Lease Proposal Form) into a Lease Template, and transmit the completed Lease Template, together with appropriate attachments, to the successful Offeror for execution.

A. This Lease is made and entered into between

310 WISCONSIN ROLLUP LLC

(Lessor), whose principal place of business is **55 FIFTH AVE, 15TH FLOOR, NEW YORK, NY, 10003**, and whose interest in the Property described herein is that of Fee Owner, and

The United States of America

(Government), acting by and through the designated representative of the General Services Administration (GSA), upon the terms and conditions set forth herein.

B. Witnesseth**:** The parties hereto, for the consideration hereinafter mentioned, covenant and agree as follows:

Lessor hereby leases to the Government the Premises described herein, being all or a portion of the Property located at

310W – 310 W WISCONSIN AVE, MILWAUKEE, WI, 53203-2213

and more fully described in Section 1 and Exhibit **A,** together with rights to the use of parking and other areas as set forth herein, to be used for such purposes as determined by GSA.

C. LEASE TERM

To Have and To Hold the said Premises with its appurtenances for the term beginning upon acceptance of the Premises as required by this Lease and continuing for a period of

15 Years, 10 Years Firm,

In Witness Whereof, the parties to this Lease evidence their agreement to all terms and conditions set forth herein by their signatures below, to be effective as of the date of delivery of the fully executed Lease to the Lessor.

FOR THE LESSOR:

DocuSigned by:
(b) (6) [redacted] ny

Name: _____

Title: Director of Asset Management

Entity: Time Equities, Inc. As Agent

Date: 3/10/2022

FOR THE GOVERNMENT:

DocuSigned by:
(b) (6) [redacted]

Name: Christine Reynolds

Title: Lease Contracting Officer

General Services Administration, Public Buildings Service

Date: 3/11/2022

WITNESSED FOR THE LESSOR BY:

DocuSigned by:
(b) (6) [redacted]
CA95DA452454442...

Name: Brad Gordon

Title: Director of Acquisitions

Date: 3/10/2022

The information collection requirements contained in this Solicitation/Contract, that are not required by the regulation, have been approved by the Office of Management and Budget pursuant to the Paperwork Reduction Act and assigned the OMB Control No. 3090-0163.

subject to termination and renewal rights as may be hereinafter set forth. The commencement date of this Lease, along with any applicable termination and renewal rights, shall be more specifically set forth in a Lease Amendment upon substantial completion and acceptance of the Space by the Government.

SECTION 1 THE PREMISES, RENT, AND OTHER TERMS

1.01 THE PREMISES (OCT 2016)

The Premises are described as follows:

A. Office and Related Space: **23,475** rentable square feet (RSF), yielding **19,894** ANSI/BOMA Office Area (ABOA) square feet (SF) of office and related Space located on the **8th West** floor(s) of the Building, as depicted on the floor plan(s) attached hereto as Exhibit **A**.

B. Common Area Factor: The Common Area Factor (CAF), defined under Section 2 of the Lease, is established as **18** percent. This factor, rounded to the nearest whole percentage, shall be used for purposes of rental adjustments in accordance with the Payment Clause of the General Clauses.

C. INTENTIONALLY DELETED

1.02 EXPRESS APPURTENANT RIGHTS (SEP 2013)

The Government shall have the non-exclusive right to the use of Appurtenant Areas, and shall have the right to post Rules and Regulations Governing Conduct on Federal Property, Title 41, CFR, Part 102-74, Subpart C within such areas. The Government will coordinate with Lessor to ensure signage is consistent with Lessor's standards. Appurtenant to the Premises and included in the Lease are rights to use the following:

A. Parking: **5** parking spaces as depicted on the plan attached hereto as Exhibit **B,** reserved for the exclusive use of the Government, of which **5** shall be structured/inside parking spaces, and **0** shall be surface/outside parking spaces. In addition, the Lessor shall provide such additional parking spaces as required by the applicable code of the local government entity having jurisdiction over the Property.

B. Antennas, Satellite Dishes, and Related Transmission Devices: (1) Space located on the roof of the Building sufficient in size for the installation and placement of telecommunications equipment, (2) the right to access the roof of the Building, and (3) use of all Building areas (e.g., chases, plenums, etc.) necessary for the use, operation, and maintenance of such telecommunications equipment at all times during the term of this Lease.

1.03 RENT AND OTHER CONSIDERATION (OCT 2020)

A. The Government shall pay the Lessor annual rent, payable in monthly installments in arrears, at the following rates:

	FIRM TERM ANNUAL RENT	NON FIRM TERM ANNUAL RENT
SHELL RENT[1]	(b) (4)	
OPERATING COSTS[2]		
TENANT IMPROVEMENTS RENT[3]		
BUILDING SPECIFIC AMORTIZED CAPITAL (BSAC)[4]		
PARKING[5]		
TOTAL ANNUAL RENT[6]	**$653,778.75**	**$483,200.90**

[1]Shell rent calculation:
(Firm Term) (b) (4)
(Non Firm T
[2]Operating Costs re
[3]Tenant Improvements of (b) (4) are amortized at a rate of (b) (4)
[4]Building Specific Amortized Capital (BSAC) of (b) (4) are amortized at a rate of (b) (4)
[5]Parking costs described under sub-paragraph B below
[6]Total Annual Rent does not reflect reduction for free rent (if applicable). See subparagraph C below.

B. Parking shall be provided at a rate of $**0.00** per parking space per month (structured/inside), and $**0.00** per parking space per month (surface/outside).

C. (b) (4) he Lessor has offered free rent for the first (b) (4) months of the Lease (free rent includes shell, operating, TI, BSAC and parking rent). Therefore, the fir months of the Lease shall be provided at no cost to the Government.

D. INTENTIONALLY DELETED

E. Rent is subject to adjustment based upon a mutual on-site measurement of the Space upon acceptance, not to exceed **19,894** ABOA SF based upon the methodology outlined under the "Payment" clause of GSA Form 3517.

F. Rent is subject to adjustment based upon the final Tenant Improvement (TI) cost to be amortized in the rental rate, as agreed upon by the parties subsequent to the Lease Award Date.

G. Rent is subject to adjustment based on the final Building Specific Amortized Capital (BSAC) cost to be amortized in the rental rate, as agreed upon by the parties subsequent to the Lease Award Date.

H. If the Government leases the Premises for less than a full calendar month, then rent shall be prorated based on the actual number of days leased for that month.

I. Rent shall be paid to Lessor by electronic funds transfer (EFT) in accordance with the provisions of the General Clauses. Rent shall be payable using the EFT information contained in the System for Award Management (SAM). In the event the EFT information changes, the Lessor shall be responsible for providing the updated information to SAM. Failure by the Lessor to maintain an active registration in SAM may result in delay of rental payments until such time as the SAM registration is activated.

J. Lessor shall provide to the Government, in exchange for the payment of rental and other specified consideration, the following:

1. The leasehold interest in the Property described herein in the paragraph entitled "The Premises."

2. All costs, expenses and fees to perform the work required for acceptance of the Premises in accordance with this Lease, including all costs for labor, materials, and equipment, professional fees, contractor fees, attorney fees, permit fees, inspection fees, and similar such fees, and all related expenses.

3. Performance or satisfaction of all other obligations set forth in this Lease; and all services, utilities, and maintenance required for the proper operation of the Property, the Building, and the Premises in accordance with the terms of the Lease, including, but not limited to, all inspections, modifications, repairs, replacements, and improvements required to be made thereto to meet the requirements of this Lease.

K. For succeeding Leases with an incumbent Lessor where the Government is currently in occupancy and possession of the leased Premises and where the Lease requires the Lessor to perform alterations using either the TIA or BSAC, the amortized tenant improvement rent and/or BSAC rent will not commence until the alterations are complete and accepted by the Government. Upon acceptance of these improvements, the Government will commence payment of the tenant improvement and/or BSAC rent as stipulated under the Lease, in addition to payment of the tenant improvement and/or BSAC rent for the period starting from the Lease Term Commencement Date to the date of tenant improvements/BSAC acceptance by the Government (such rent payment will not include any additional interest). Alternatively, the Government may elect to re-amortize the tenant improvements/BSAC over the remaining Firm Term of the Lease, at the amortization rate stipulated in the Lease. In the event the Government does not use all the TIA or BSAC, then the rental payments will be adjusted in accordance with the provisions of the Lease (e.g., de-amortization).

L. INTENTIONALLY DELETED

1.04 BROKER COMMISSION AND COMMISSION CREDIT (OCT 2016)

A. **JONES LANG LASALLE AMERICAS, INC.** (Broker) is the authorized real estate Broker representing GSA in connection with this Lease transaction. The total amount of the Commission is (b) (4) and is earned upon Lease execution, payable according to the Commission Agreement signed between the Lessor and Broker. Only (b) (4) of the Commission will be payable to **JONES LANG LASALLE AMERICAS, INC.** with the remaining (b) (4) which is the Commission Credit, to be credited to the shell rental portion of the annual rental payments due and owing to fully recapture this Commission Credit. The reduction in shell rent shall commence with the first month of the rental payments and continue until the credit has been fully recaptured in equal monthly installments over the shortest time practicable.

B. Notwithstanding the "Rent and Other Consideration" paragraph of this Lease, the shell rental payments due and owing under this Lease shall be reduced to recapture fully this Commission Credit. The reduction in shell rent shall commence with the first month of the rental payments and continue as indicated in this schedule for adjusted Monthly Rent:

Month **9** Rental Payment (b) (4) minus prorated Commission Credit of (b) (4) equals (b) (4) adjusted **9th** Month's Rent.*

Month **10** Rental Payment (b) (4) minus prorated Commission Credit of (b) (4) equals (b) (4) adjusted **10th** Month's Rent.*

Month **11** Rental Payment (b) (4) minus prorated Commission Credit of (b) (4) equals (b) (4) adjusted **11th** Month's Rent.*

Month **12** Rental Payment (b) (4) minus prorated Commission Credit of (b) (4) equals (b) (4) adjusted **12th** Month's Rent.*

* Subject to change based on adjustments outlined under the paragraph "Rent and Other Consideration."

1.05 TERMINATION RIGHTS (OCT 2016)

The Government may terminate this Lease, in whole or in parts, at any time effective after the Firm Term of this Lease, by providing not less than **60** days' prior written notice to the Lessor. The effective date of the termination shall be the day following the expiration of the required notice period or the termination date set forth in the notice, whichever is later. No rental shall accrue after the effective date of termination.

1.06 ~~RENEWAL RIGHTS (OCT 2016)~~ INTENTIONALLY DELETED

1.07 DOCUMENTS INCORPORATED IN THE LEASE (OCT 2020)

The following documents are attached to and made part of the Lease:

DOCUMENT NAME	NO. OF PAGES	EXHIBIT
FLOOR PLAN(S)	2	A
PARKING PLAN(S)	2	B
AGENCY REQUIREMENTS	181	C
SECURITY REQUIREMENTS	11	D
GSA FORM 3517B GENERAL CLAUSES (REV 01/22)	18	E
GSAR CLAUSE 552.270-34	2	F
Covered Telecommunications Equipment or Services Representation FAR 52.204-24	5	G
GSAR Representation Clause 552.270-33	2	H

1.08 TENANT IMPROVEMENT RENTAL ADJUSTMENT (OCT 2016)

A. The Tenant Improvement Allowance (TIA) for purposes of this Lease is (b) (4) ABOA SF. The TIA is the amount that the Lessor shall make available for the Government to be used for TIs. This amount is amortized in the re Firm Term of this Lease at an annual interest rate of (b) (4)

B. The Government, at its sole discretion, shall make all decisions as to the use of the TIA. The Government may use all or part of the TIA. The Government may return to the Lessor any unused portion of the TIA in exchange for a decrease in rent according to the agreed-upon amortization rate over the Firm Term.

C. The Government may elect to make lump sum payments for any or all work covered by the TIA. That part of the TIA amortized in the rent shall be reduced accordingly. At any time after occupancy and during the Firm Term of the Lease, the Government, at its sole discretion, may elect to pay lump sum for any part or all of the remaining unpaid amortized balance of the TIA. If the Government elects to make a lump sum payment for the TIA after occupancy, the payment of the TIA by the Government will result in a decrease in the rent according to the amortization rate over the Firm Term of the Lease.

D. If it is anticipated that the Government will spend more than the identified TIA, the Government may elect to:

1. Reduce the TI requirements;
2. Pay lump sum for the overage upon substantial completion in accordance with the "Acceptance of Space and Certificate of Occupancy" paragraph;
3. Negotiate an increase in the rent.

1.09 TENANT IMPROVEMENT FEE SCHEDULE (OCT 2020)

For pricing TI costs, the following rates shall apply for the initial build-out of the Space.

	INITIAL BUILD-OUT
ARCHITECT/ENGINEER (A/E) FEES ($ PER ABOA SF OR % OF TI CONSTRUCTION COSTS)	(b) (4)
LESSOR'S PROJECT MANAGEMENT FEE (% OF TI CONSTRUCTION COSTS)	(b) (4)

1.10 BUILDING SPECIFIC AMORTIZED CAPITAL (SEP 2012)

For purposes of this Lease, the Building Specific Amortized Capital (BSAC) is (b) (4) ABOA SF. The Lessor will make the total BSAC amount available to the Government, which will use the funds for security related improve is amount is amortized in the rent over the Firm Term of this lease at an annual interest rate of (b) (4)

1.11 BUILDING SPECIFIC AMORTIZED CAPITAL RENTAL ADJUSTMENT (SEP 2013)

A. The Government, at its sole discretion, shall make all decisions about the use of the Building Specific Amortized Capital (BSAC). The Government may use all or part of the BSAC. The Government may return to the Lessor any unused portion of the BSAC in exchange for a decrease in rent (where applicable) according to the agreed-upon amortization rate over the Firm Term.

B. The Government may elect to make lump-sum payments for any work covered by the BSAC. The part of the BSAC amortized in the rent shall be reduced accordingly. At any time after occupancy and during the Firm Term of the Lease, the Government, at its sole discretion, may elect to pay a lump sum for any part or all of the remaining unpaid amortized balance of the BSAC. If the Government elects to make a lump-sum payment for the

BSAC after occupancy, the payment of the BSAC by the Government will result in a decrease in the rent according to the amortization rate over the Firm Term of the Lease.

C. If it is anticipated that the Government will spend more than the BSAC identified above, the Government may elect to:

1. Reduce the security countermeasure requirements;

2. Pay a lump sum for the amount overage upon substantial completion in accordance with the "Acceptance of Space and Certificate of Occupancy" paragraph; or

3. Negotiate an increase in the rent.

1.12 PERCENTAGE OF OCCUPANCY FOR TAX ADJUSTMENT (OCT 2018)

A. As of the Lease Award Date, the Government's Percentage of Occupancy, as defined in the "Real Estate Tax Adjustment" paragraph of this Lease is **3.81** percent. The Percentage of Occupancy is derived by dividing the total Government Space of **23,475** RSF by the total Building space of **616,706** RSF. The tax parcel number is NEIGHBORHOOD 646 PLAT PAGE 392/29 ORIGINAL PLAT OF THE TOWN OF MILW WEST OF THE RIVE R IN SECS (20 & 29)-7-22 BLOCK 61 LOTS 1-4-5 & 8 T.

B. All relevant tax adjustment documentation (e.g., copies of paid tax receipts, invoices) must be submitted online via the GSA Real Estate Tax Portal at RET.GSA.GOV .

1.13 ~~REAL ESTATE TAX BASE (SEP 2013)~~ INTENTIONALLY DELETED

1.14 OPERATING COST BASE (OCT 2016)

The parties agree, for the purpose of applying the paragraph titled "Operating Costs Adjustment," that the Lessor's base rate for operating costs shall (b) (4) per RSF or (b) (4) annually.

1.15 RATE FOR ADJUSTMENT FOR VACANT LEASED PREMISES (SEP 2013)

In accordance with the paragraph entitled "Adjustment for Vacant Premises," if the Government fails to occupy or vacates the entire or any portion of the Premises prior to expiration of the term of the Lease, the operating costs paid by the Government as part of the rent shall be reduced by (b) (4) ABOA SF of Space vacated by the Government.

1.16 HOURLY OVERTIME HVAC RATES (OCT 2016)

A. The following rates shall apply in the application of the paragraph titled "Overtime HVAC Usage:"

- (b) (4) per hour per zone
- No. of zones: **8**

B. There is no overtime charge during the following weekend hours:
Saturday: **7:00** AM through **6:00** PM

1.17 ~~ADJUSTMENT FOR REDUCED SERVICES (OCT 2018)~~ INTENTIONALLY DELETED

1.18 BUILDING IMPROVEMENTS (MAR 2016)

Before the Government accepts the Space, the Lessor shall complete the following additional Building improvements:

A. The building must have an up to date Energy Star label

1.19 HUBZONE SMALL BUSINESS CONCERNS ADDITIONAL PERFORMANCE REQUIREMENTS (MAR 2012)

If the Lessor is a qualified HUBZone small business concern (SBC) that did not waive the price evaluation preference then as required by 13 C.F.R. 126.700, the HUBZone SBC must spend at least 50% of the cost of the contract incurred for personnel on its own employees or employees of other qualified HUBZone SBC's and must meet the performance of the work requirements for subcontracting in 13 C.F.R. § 125.6(c). If the Lessor is a HUBZone joint venture, the aggregate of the qualified HUBZone SBC's to the joint venture, not each concern separately, must perform the applicable percentage of work required by this clause.

1.20 LESSOR'S UNIQUE ENTITY IDENTIFIER (OCT 2020)

Lessor's Unique Entity Identifier (currently referred to as a Dun & Bradstreet DUNS Number): (b) (4)

SECTION 2 GENERAL TERMS, CONDITIONS, AND STANDARDS

2.01 DEFINITIONS AND GENERAL TERMS (OCT 2016)

Unless otherwise specifically noted, all terms and conditions set forth in this Lease shall be interpreted by reference to the following definitions, standards, and formulas:

A. Appurtenant Areas. Appurtenant Areas are defined as those areas and facilities on the Property that are not located within the Premises, but for which rights are expressly granted under this Lease, or for which rights to use are reasonably necessary or reasonably anticipated with respect to the Government's enjoyment of the Premises and express appurtenant rights.

B. Broker. If GSA awarded this Lease using a contract real estate broker, Broker shall refer to GSA's broker.

C. Building. Building(s) situated on the Property in which the Premises are located.

D. Commission Credit. If GSA awarded this Lease using a Broker, and the Broker agreed to forego a percentage of its commission to which it is entitled in connection with the award of this Lease, the amount of this credit is referred to as the "Commission Credit."

E. Common Area Factor. The "Common Area Factor" (CAF) is a conversion factor determined by the Building owner and applied by the owner to the ABOA SF to determine the RSF for the leased Space. The CAF is expressed as a percentage of the difference between the amount of rentable SF and ABOA SF, divided by the ABOA SF. For example, 11,500 RSF and 10,000 ABOA SF will have a CAF of 15% [(11,500 RSF-10,000 ABOA SF)/10,000 ABOA SF]. For the purposes of this Lease, the CAF shall be determined in accordance with the applicable ANSI/BOMA standard for the type of space to which the CAF shall apply.

F. Contract. "Contract" shall mean this Lease.

G. Contractor. "Contractor" shall mean Lessor.

H. Days. All references to "day" or "days" in this Lease shall mean calendar days, unless specified otherwise.

I. FAR. All references to the FAR shall be understood to mean the Federal Acquisition Regulation, codified at 48 CFR Chapter 1.

J. Firm Term/Non-Firm Term. The Firm Term is that part of the Lease term that is not subject to termination rights. The Non-Firm Term is that part of the Lease term following the end of the Firm Term.

K. GSAR. All references to the GSAR shall be understood to mean the GSA supplement to the FAR, codified at 48 CFR Chapter 5.

L. Lease Term Commencement Date. The date on which the lease term commences.

M. Lease Award Date. The date the LCO executes the Lease and mails or otherwise furnishes written notification of the executed Lease to the successful Offeror (date on which the parties' obligations under the Lease begin).

N. Premises. The Premises are defined as the total Office Area or other type of Space, together with all associated common areas, described in Section 1 of this Lease, and delineated by plan in the attached exhibit. Parking and other areas to which the Government has rights under this Lease are not included in the Premises.

O. Property. Defined as the land and Buildings in which the Premises are located, including all Appurtenant Areas (e.g., parking areas) to which the Government is granted rights.

P. Rentable Space or Rentable Square Feet (RSF). Rentable Space is the area for which a tenant is charged rent. It is determined by the Building owner and may vary by city or by building within the same city. The Rentable Space may include a share of Building support/common areas such as elevator lobbies, Building corridors, and floor service areas. Floor service areas typically include restrooms, janitor rooms, telephone closets, electrical closets, and mechanical rooms. The Rentable Space does not include vertical building penetrations and their enclosing walls, such as stairs, elevator shafts, and vertical ducts. Rentable Square Feet is calculated using the following formula for each type of Space (e.g., office, warehouse, etc.) included in the Premises: ABOA SF of Space x (1 + CAF) = RSF.

Q. Space. The Space shall refer to that part of the Premises to which the Government has exclusive use, such as Office Area, or other type of Space. Parking areas to which the Government has rights under this Lease are not included in the Space.

R. Office Area. For the purposes of this Lease, Space shall be measured in accordance with the standard (Z65.1-1996) provided by American National Standards Institute/Building Owners and Managers Association (ANSI/BOMA) for Office Area, which means "the area where a tenant normally houses personnel and/or furniture, for which a measurement is to be computed." References to ABOA mean ANSI/BOMA Office Area.

S. Working Days. Working Days shall mean weekdays, excluding Saturdays and Sundays and Federal holidays.

2.02 AUTHORIZED REPRESENTATIVES (OCT 2016)

Signatories to this Lease shall have full authority to bind their respective principals with regard to all matters relating to this Lease. No other persons shall be understood to have any authority to bind their respective principals, except to the extent that such authority may be explicitly delegated by notice to the other party, or to the extent that such authority is transferred by succession of interest. The Government shall have the right to substitute its Lease Contracting Officer (LCO) by notice, without an express delegation by the prior LCO.

2.03 ALTERATIONS REQUESTED BY THE GOVERNMENT (OCT 2018)

A. The Government may request the Lessor to provide alterations during the term of the Lease. Alterations will be ordered by issuance of a Lease Amendment, GSA Form 300, Order for Supplies or Services, or a tenant agency-approved form when specifically authorized to do so by the LCO. The General Services Administration Acquisition Manual ("GSAM") clause, 552.270-31, Prompt Payment, including its invoice requirements, shall apply to orders for alterations. All orders are subject to the terms and conditions of this Lease and may be placed by the LCO or a warranted contracting officer's representative (COR) in GSA or the tenant agency when specifically authorized to do so by the LCO, subject to the threshold limitation below.

B. Orders for alterations issued by an authorized COR are limited to no more than $250,000 (LCOs are not subject to this threshold). This threshold will change according to future adjustments of the simplified acquisition threshold (see FAR 2.101). The LCO will provide the Lessor with a list of tenant agency officials authorized to place orders and will specify any limitations on the authority delegated to tenant agency officials. The tenant agency officials are not authorized to deal with the Lessor on any other matters.

C. Payments for alterations ordered by the tenant agency under the authorization described in sub-paragraph B will be made directly by the tenant agency placing the order.

2.04 WAIVER OF RESTORATION (OCT 2018)

Lessor shall have no right to require the Government to restore the Premises upon expiration or earlier termination (full or partial) of the Lease, and waives all claims against the Government for waste, damages, or restoration arising from or related to (a) the Government's normal and customary use of the Premises during the term of the Lease (including any extensions thereof), as well as (b) any initial or subsequent alteration to the Premises regardless of whether such alterations are performed by the Lessor or by the Government. At its sole option, the Government may abandon property in the Space following expiration or earlier termination (full or partial) of the Lease, in which case the property will become the property of the Lessor and the Government will be relieved of any liability in connection therewith.

2.05 PAYMENT OF BROKER (JUL 2011)

If GSA awarded the Lease through its Broker, the Lessor shall pay GSA's Broker its portion of the commission one half upon Lease award and the remaining half upon acceptance of the Space. "Its portion of the commission" means the agreed-upon commission to GSA's Broker minus the Commission Credit specified in the Lease or Lease Amendment.

2.06 CHANGE OF OWNERSHIP/NOVATION (OCT 2020)

A. If during the term of the Lease, title to the Property is transferred or the Lessor changes its legal name, the Lessor and its successor shall comply with the requirements of FAR Subpart 42.12. If title is transferred, the Lessor shall notify the Government within five days of the transfer of title.

B. The Government and the Lessor may execute a Change of Name Agreement if the Lessor is changing only its legal name, and the Government's and the Lessor's respective rights and obligations remain unaffected.

C. If title to the Property is transferred, the Government, the original Lessor (Transferor), and the new owner or assignee (Transferee) shall execute a Novation Agreement providing for the transfer of Transferor's rights and obligations under the Lease to the Transferee. When executed on behalf of the Government, a Novation Agreement will be made part of the Lease via Lease Amendment.

D. In addition to all documents required by FAR 42.1204, the LCO may request additional information (e.g., copy of the deed, bill of sale, certificate of merger, contract, court decree, articles of incorporation, operation agreement, partnership certificate of good standing, etc.) from the Transferor or Transferee to verify the parties' representations regarding the transfer, and to determine whether the transfer of the Lease is in the Government's interest.

E. If the LCO determines that recognizing the Transferee as the Lessor will not be in the Government's interest, the Transferor shall remain fully liable to the Government for the Transferee's performance of obligations under the Lease, notwithstanding the transfer. Under no condition shall the Government be obligated to release the Transferor of obligations prior to (a) the rent commencement date; and (b) any amounts due and owing to the Government under the Lease that have been paid in full or completely set off against the rental payments due under the Lease.

F. As a condition for being recognized as the Lessor and entitlement to receiving rent, the Transferee must register in the System for Award Management (SAM) for purposes of "All Awards" (See FAR 52.232-33), and complete all required representations and certifications within SAM.

G. If title to the Property is transferred, rent shall continue to be paid to the original Lessor, subject to the Government's rights as provided for in this Lease. The Government's obligation to pay rent to the Transferee shall commence on the effective date of the Lease Amendment incorporating the Novation Agreement. The Lease Amendment will not be issued until the Government has received all information reasonably required by the LCO, the Government has determined that recognizing the Transferee as the Lessor is in the Government's interest (which determination will be prompt and not unreasonably withheld), and the Transferee has met all conditions specified in sub-paragraph F. The original Lessor must maintain an active registration in SAM until the Novation process is complete.

2.07 REAL ESTATE TAX ADJUSTMENT (JUN 2012)

A. Purpose: This paragraph provides for adjustment in the rent (tax adjustment) to account for increases or decreases in Real Estate Taxes for the Property after the establishment of the Real Estate Tax Base, as those terms are defined herein. Tax adjustments shall be calculated in accordance with this paragraph.

B. Definitions: The following definitions apply to the use of the terms within this paragraph:

Property is defined as the land and Buildings in which the Premises are located, including all Appurtenant Areas (e.g., parking areas to which the Government is granted rights).

Real Estate Taxes are those taxes that are levied upon the owners of real property by a Taxing Authority (as hereinafter defined) of a state or local Government on an ad valorem basis to raise general revenue for funding the provision of government services. The term excludes, without limitation, special assessments for specific purposes, assessments for business improvement districts, and/or community development assessments.

Taxing Authority is a state, commonwealth, territory, county, city, parish, or political subdivision thereof, authorized by law to levy, assess, and collect Real Estate Taxes.

Tax Year refers to the 12-month period adopted by a Taxing Authority as its fiscal year for assessing Real Estate Taxes on an annual basis.

Tax Abatement is an authorized reduction in the Lessor's liability for Real Estate Taxes below that determined by applying the generally applicable real estate tax rate to the Fully Assessed (as hereinafter defined) valuation of the Property.

Unadjusted Real Estate Taxes are the full amount of Real Estate Taxes that would be assessed for the Property for one full Tax Year without regard to the Lessor's entitlement to any Tax Abatements (except if such Tax Abatement came into effect after the date of award of the Lease), and not including any late charges, interest or penalties. If a Tax Abatement comes into effect after the date of award of the Lease, "unadjusted Real Estate Taxes" are the full amount of Real Estate Taxes assessed for the Property for one full Tax Year, less the amount of such Tax Abatement, and not including any late charges, interest, or penalties.

Real Estate Tax Base is the unadjusted Real Estate Taxes for the first full Tax Year following the commencement of the Lease term. If the Real Estate Taxes for that Tax Year are not based upon a Full Assessment of the Property, then the Real Estate Tax Base shall be the Unadjusted Real Estate Taxes for the Property for the first full Tax Year for which the Real Estate Taxes are based upon a Full Assessment. Such first full Tax Year may be hereinafter referred to as the Tax Base Year. Alternatively, the Real Estate Tax Base may be an amount negotiated by the parties that reflects an agreed upon base for a Fully Assessed value of the Property.

The Property is deemed to be Fully Assessed (and Real Estate Taxes are deemed to be based on a Full Assessment) only when a Taxing Authority has, for the purpose of determining the Lessor's liability for Real Estate Taxes, determined a value for the Property taking into account the value of all improvements contemplated for the Property pursuant to the Lease, and issued to the Lessor a tax bill or other notice of levy wherein the Real Estate Taxes for the full Tax Year are based upon such Full Assessment. At no time prior to the issuance of such a bill or notice shall the Property be deemed Fully Assessed.

Percentage of Occupancy refers to that portion of the Property exclusively occupied or used by the Government pursuant to the Lease. For Buildings, the Percentage of Occupancy is determined by calculating the ratio of the RSF occupied by the Government pursuant to the Lease to the total RSF in the Building or Buildings so occupied, and shall not take into account the Government's ancillary rights including, but not limited to, parking or roof space for antennas (unless facilities for such ancillary rights are separately assessed). This percentage shall be subject to adjustment to take into account increases or decreases for Space leased by the Government or for rentable space on the Property.

C. Adjustment for changes in Real Estate Taxes. After the Property is Fully Assessed, the Government shall pay its share of any increases and shall receive its share of any decreases in the Real Estate Taxes for the Property, such share of increases or decreases to be referred to herein as "tax adjustment." The amount of the tax adjustment shall be determined by multiplying the Government's Percentage of Occupancy by the difference between the current year Unadjusted Real Estate Taxes and the Real Estate Tax Base, less the portion of such difference not paid due to a Tax Abatement (except if a Tax Abatement comes into effect after the date of award of the Lease). If a Tax Abatement comes into effect after the date of award of the Lease, the amount of the tax adjustment shall be determined by multiplying the Government's Percentage of Occupancy by the difference between the current year Unadjusted Real Estate Taxes and the Real Estate Tax Base. The Government shall pay the tax adjustment in a single annual lump sum payment to the Lessor. In the event that this tax adjustment results in a credit owed to the Government, the Government may elect to receive payment in the form of a rental credit or lump sum payment.

If the Property contains more than one separately assessed parcel, then more than one tax adjustment shall be determined based upon the Percentage of Occupancy, Real Estate Tax Base, and Real Estate Taxes for each respective parcel.

After commencement of the Lease term, the Lessor shall provide to the LCO copies of all real estate tax bills for the Property, all documentation of Tax Abatements, credits, or refunds, if any, and all notices which may affect the assessed valuation of the Property, for the Tax Year prior to the commencement of the Lease Term, and all such documentation for every year following. Lessor acknowledges that the LCO shall rely on the completeness and accuracy of these submissions in order to establish the Real Estate Tax Base and to determine tax adjustments. The LCO may memorialize the establishment of the Real Estate Tax Base by issuing a unilateral administrative lease amendment indicating the base year, the amount of the Real Estate Tax Base, and the Government's Percentage of Occupancy.

The Real Estate Tax Base is subject to adjustment when increases or decreases to Real Estate Taxes in any Tax Year are attributable to (a) improvements or renovations to the Property not required by this Lease, or (b) changes in net operating income for the Property not derived from this Lease. If either condition results in a change to the Real Estate Taxes, the LCO may re-establish the Real Estate Tax Base as the Unadjusted Real

Estate Taxes for the Tax Year the Property is reassessed under such condition, less the amount by which the Unadjusted Real Estate Taxes for the Tax Year prior to reassessment exceeds the prior Real Estate Tax Base.

If this Lease includes any options to renew the term of the Lease, or be otherwise extended, the Real Estate Tax Base for determining tax adjustments during the renewal term or extension shall be the last Real Estate Tax Base established during the base term of the Lease.

If any Real Estate Taxes for the Property are retroactively reduced by a Taxing Authority during the term of the Lease, the Government shall be entitled to a proportional share of any tax refunds to which the Lessor is entitled, calculated in accordance with this Paragraph. Lessor acknowledges that it has an affirmative duty to disclose to the Government any decreases in the Real Estate Taxes paid for the Property during the term of the Lease. Lessor shall annually provide to the LCO all relevant tax records for determining whether a tax adjustment is due, irrespective of whether it seeks an adjustment in any Tax Year.

If the Lease terminates before the end of a Tax Year, or if rent has been suspended, payment for the real estate tax increase due because of this section for the Tax Year will be prorated based on the number of days that the Lease and the rent were in effect. Any credit due the Government after the expiration or earlier termination of the Lease shall be made by a lump sum payment to the Government or as a rental credit to any succeeding Lease, as determined in the LCO's sole discretion. Lessor shall remit any lump sum payment to the Government within 15 calendar days of payment or credit by the Taxing Authority to Lessor or Lessor's designee. If the credit due to the Government is not paid by the due date, interest shall accrue on the late payment at the rate established by the Secretary of the Treasury under Section 12 of the Contract Disputes Act of 1978, as amended (41 USC § 611), that is in effect on the day after the due date. The interest penalty shall accrue daily on the amount of the credit and shall be compounded in 30-day increments inclusive from the first day after the due date through the payment date. The Government shall have the right to pursue the outstanding balance of any tax credit using all such collection methods as are available to the United States to collect debts. Such collection rights shall survive the expiration of this Lease.

In order to obtain a tax adjustment, the Lessor shall furnish the LCO with copies of all paid tax receipts, or other similar evidence of payment acceptable to the LCO, and a proper invoice (as described in GSA Form 3517, General Clauses, 552.270-31, Prompt Payment) for the requested tax adjustment, including the calculation thereof. All such documents must be received by the LCO within 60 calendar days after the last date the real estate tax payment is due from the Lessor to the Taxing Authority without payment of penalty or interest. FAILURE TO SUBMIT THE PROPER INVOICE AND EVIDENCE OF PAYMENT WITHIN SUCH TIME FRAME SHALL CONSTITUTE A WAIVER OF THE LESSOR'S RIGHT TO RECEIVE A TAX ADJUSTMENT PURSUANT TO THIS PARAGRAPH FOR THE TAX YEAR AFFECTED.

Tax Appeals. If the Government occupies more than 50 percent of the Building by virtue of this and any other Government Lease(s), the Government may, upon reasonable notice, direct the Lessor to initiate a tax appeal, or the Government may elect to contest the assessed valuation on its own behalf or jointly on behalf of Government and the Lessor. If the Government elects to contest the assessed valuation on its own behalf or on behalf of the Government and the Lessor, the Lessor shall cooperate fully with this effort, including, without limitation, furnishing to the Government information necessary to contest the assessed valuation in accordance with the filing requirements of the Taxing Authority, executing documents, providing documentary and testimonial evidence, and verifying the accuracy and completeness of records. If the Lessor initiates an appeal at the direction of the Government, the Government shall have the right to approve the selection of counsel who shall represent the Lessor with regard to such appeal, which approval shall not be unreasonably withheld, conditioned or delayed, and the Lessor shall be entitled to a credit in the amount of its reasonable expenses in pursuing the appeal.

2.08 ADJUSTMENT FOR VACANT PREMISES (OCT 2017)

A. If the Government fails to occupy any portion of the leased Premises or vacates the Premises in whole or in part prior to expiration of the term of the Lease, the rental rate and the base for operating cost adjustments will be reduced using the figure specified in the "Rate for Adjustment for Vacant Leased Premises" paragraph of this Lease.

B. If no rate reduction has been established in this Lease, the rate will be reduced by that portion of the costs per ABOA SF of operating expenses not required to maintain the Space.

C. Said reduction shall occur after the Government gives 30 calendar days' prior notice to the Lessor and shall continue in effect until the Government occupies the vacant Premises or the Lease expires or is terminated.

2.09 OPERATING COSTS ADJUSTMENT (JUN 2012)

A. Beginning with the second year of the Lease and each year thereafter, the Government shall pay annual incremental adjusted rent for changes in costs for cleaning services, supplies, materials, maintenance, trash removal, landscaping, water, sewer charges, heating, electricity, and certain administrative expenses attributable to occupancy.

B. The amount of adjustment will be determined by multiplying the base rate by the annual percent of change in the Cost of Living Index. The percent change will be computed by comparing the index figure published for the month prior to the Lease Term Commencement Date with the index figure published for the month prior which begins each successive 12-month period. For example, a Lease which commences in June of 2005 would use the index published for May of 2005, and that figure would be compared with the index published for May of 2006, May of 2007, and so on, to determine the percent change. The Cost of Living Index will be measured by the Department of Labor revised Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), U.S. city average, all items, (1982 to 1984 = 100) published by the Bureau of Labor Statistics. Payment will be made with the monthly installment of fixed rent. Rental adjustments will be effective on the anniversary date of the Lease; however, payment of the adjusted rental rate will become due on the first workday of the second month following the publication of the Cost of Living Index for the month prior to the commencement of each 12-month period.

C. In the event of any decreases in the Cost of Living Index occurring during the term of the occupancy under the Lease, the rental amount will be reduced accordingly. The amount of such reductions will be determined in the same manner as increases in rent provided under this paragraph.

D. If the Government exercises an option to extend the Lease term at the same rate as that of the original term, the option price will be based on the adjustment during the original term. Annual adjustments will continue.

2.10 ADDITIONAL POST-AWARD FINANCIAL AND TECHNICAL DELIVERABLES (JUN 2012)

A. If the Lessor is a HUBZone small business concern (SBC) that did not waive the price evaluation preference, the Lessor shall provide a certification within 10 days after Lease award to the LCO (or representative designated by the LCO) that the Lessor was an eligible HUBZone SBC on the date of award. If it is determined within 20 days after award that a HUBZone SBC Offeror that has been awarded the Lease was not an eligible HUBZone SBC at the time of award, and the HUBZone SBC Lessor failed to provide the LCO with information regarding a change to its HUBZone eligibility prior to award, then the Lease shall be subject, at the LCO's discretion, to termination, and the Government will be relieved of all obligations to the Lessor in such an event and not be liable to the Lessor for any costs, claims or damages of any nature whatsoever.

B. Within **10** days after Lease award, the Lessor shall provide to the LCO (or representative designated by the LCO) evidence of:

1. A firm commitment of funds in an amount sufficient to perform the work.

2. The names of at least two proposed construction contractors, as well as evidence of the contractors' experience, competency, and performance capabilities with construction similar in scope to that which is required herein.

3. The license or certification to practice in the state where the Building is located from the individual(s) and/or firm(s) providing architectural and engineering design services.

C. The Government shall have the right to withhold approval of design intent drawings (DIDs) until the conditions specified in sub-paragraphs A and B have been satisfied.

D. Within ten (10) calendar days after the LCO issues the Notice To Proceed (NTP) for TI construction, the Lessor shall provide to the LCO evidence of:

1. Award of a construction contract for TIs with a firm completion date. This date must be in accordance with the construction schedule for TIs as described in the "Schedule for Completion of Space" paragraph of this Lease.

2. Issuance of required permits for construction of the TIs.

2.11 ~~RELOCATION ASSISTANCE ACT (APR 2011)~~ INTENTIONALLY DELETED

SECTION 3 CONSTRUCTION STANDARDS AND SHELL COMPONENTS

3.01 ~~LABOR STANDARDS (OCT 2016)~~ INTENTIONALLY DELETED

3.02 WORK PERFORMANCE (JUN 2012)

All work in performance of this Lease shall be done by skilled workers or mechanics and shall be acceptable to the LCO. The LCO may reject the Lessor's workers 1) if such are unlicensed, unskilled, or otherwise incompetent, or 2) if such have demonstrated a history of either untimely or otherwise unacceptable performance in connection with work carried out in conjunction with either this contract or other government or private contracts.

3.03 EXISTING FIT-OUT, SALVAGED, OR REUSED BUILDING MATERIAL (OCT 2019)

A. Items and materials existing in the Premises, or to be removed from the Premises during the demolition phase, are eligible for reuse in the construction phase of the project. The reuse of items and materials is preferable to recycling them; however, items considered for reuse shall be in re-furbished condition and shall meet the quality standards set forth by the Government in this Lease. In the absence of definitive quality standards, the Lessor is responsible to confirm that the quality of the item(s) in question shall meet or exceed accepted industry or trade standards for first quality commercial grade applications.

B. Unless waived by the LCO, the Lessor shall submit a reuse plan for leases 10,000 RSF or greater. The Government will not pay for existing fixtures and other TIs accepted in place. However, the Government will reimburse the Lessor, as part of the TIA, the costs to repair or improve such fixtures or improvements identified on the reuse plan and approved by the LCO.

3.04 CONSTRUCTION WASTE MANAGEMENT (OCT 2019)

A. For leases 10,000 RSF or greater, recycling construction waste is mandatory for initial space alterations for TIs and subsequent alterations under the Lease.

B. SUBMITTAL REQUIREMENT: Prior to construction commencement, a proposed plan following industry standards to recycle construction waste. The construction waste management plan shall quantify material diversion goals and maximize the materials to be recycled and/or salvaged (at least 50 percent) from construction, demolition, and packaging debris. Where the small quantity of material, the extraordinarily complex nature of the waste disposal method, or prohibitive expense for recycling would represent a genuine hardship, the Government, upon written request of the Lessor and approval of the LCO, may permit alternative means of disposal.

C. The Lessor shall recycle the following items during both the demolition and construction phases of the project, subject to economic evaluation and feasibility: Ceiling grid and tile, light fixtures, including proper disposal of any transformers, ballasts, and fluorescent light bulbs, duct work and HVAC equipment, wiring and electrical equipment, aluminum and/or steel doors and frames, hardware, drywall, steel studs, carpet, carpet backing, and carpet padding, wood, insulation, cardboard packaging, pallets, windows and glazing materials, all miscellaneous metals (as in steel support frames for filing equipment), and all other finish and construction materials.

D. If any waste materials encountered during the demolition or construction phase are found to contain lead, asbestos, polychlorinated biphenyls (PCBs) (such as fluorescent lamp ballasts), or other harmful substances, they shall be handled and removed in accordance with Federal and state laws and requirements concerning hazardous waste.

E. In addition to providing "one time" removal and recycling of large scale demolition items such as carpeting or drywall, the Lessor shall provide continuous facilities for the recycling of incidental construction waste during the initial construction.

F. Construction materials recycling records shall be maintained by the Lessor and shall be accessible to the LCO. Records shall include materials recycled or land-filled, quantity, date, and identification of hazardous wastes.

3.05 WOOD PRODUCTS (OCT 2019)

A. Particle board, strawboard, and plywood materials used shall be free of formaldehyde or sufficiently aged prior to use such that indoor air levels in the finished leased space shall not exceed 0.016 parts per million (ppm) of formaldehyde.

B. All materials comprised of combustible substances, such as wood plywood and wood boards, shall be treated with fire retardant chemicals by a pressure impregnation process or other methods that treats the materials throughout as opposed to surface treatment.

C. For leases 10,000 RSF or greater, new installations of wood products shall not contain wood from endangered wood species, as listed by the Convention on International Trade in Endangered Species. The list of species can be found at HTTP://WWW.WOOD-DATABASE.COM/WOOD-ARTICLES/RESTRICTED-AND-ENDANGERED-WOOD-SPECIES/ or HTTPS://WWW.FWS.GOV/INTERNATIONAL/PLANTS/CURRENT-CITES-LISTINGS-OF-TREE-SPECIES.HTML. In addition, the Lessor is encouraged to use independently certified forest products. For information on certification and certified wood products, refer to the Forest Stewardship Council United States (HTTPS://US.FSC.ORG/EN-US), or the Sustainable Forestry Initiative (HTTP://WWW.SFIPROGRAM.ORG/).

3.06 ADHESIVES AND SEALANTS (OCT 2019)

A. All adhesives employed (including, but not limited to, adhesives for carpet, carpet tile, plastic laminate, wall coverings, adhesives for wood, or sealants) shall meet the requirements of the manufacturer of the products adhered or involved. The Lessor shall use adhesives and sealants with no

heavy metals, and that do not result in indoor air levels above 0.016 parts per million (ppm) of formaldehyde. Adhesives and other materials used for the installation of carpets shall be limited to those having a flash point of 140 degrees F or higher.

B. For leases 10,000 RSF or greater, the Lessor is encouraged to use applicable environmentally preferable criteria that are recommended in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/8/MISCELLANEOUS/1238/ADHESIVES/0.

3.07 BUILDING SHELL REQUIREMENTS (OCT 2016)

A. The Building Shell shall be designed, constructed, and maintained in accordance with the standards set forth herein and completed prior to acceptance of Space. For pricing, fulfillment of all requirements not specifically designated as TIs, Building Specific Amortized Capital, Operating Costs, or other rent components as indicated shall be deemed included in the Shell Rent.

B. Base structure and Building enclosure components shall be complete. All common areas accessible by the Government, such as lobbies, fire egress corridors and stairwells, elevators, garages, and service areas, shall be complete. Restrooms shall be complete and operational. All newly installed Building shell components, including but not limited to, heating, ventilation, and air conditioning (HVAC), electrical, ceilings, sprinklers, etc., shall be furnished, installed, and coordinated with TIs. Circulation corridors are provided as part of the base Building only on multi-tenanted floors where the corridor is common to more than one tenant. On single tenant floors, only the fire egress corridor(s) necessary to meet code is provided as part of the shell.

C. The Building Shell rental rate shall also include, but is not limited to, costs included listed under Section II of GSA Form 1217, Lessor's Annual Cost Statement, including insurance, taxes, lease commission and management, in addition to profit, reserve costs and loan financing for the Building.

3.08 RESPONSIBILITY OF THE LESSOR AND LESSOR'S ARCHITECT/ENGINEER (JUN 2012)

A. The Lessor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Lessor under this contract. The Lessor shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, or other services.

B. THE LESSOR REMAINS SOLELY RESPONSIBLE FOR DESIGNING, CONSTRUCTING, OPERATING, AND MAINTAINING THE LEASED PREMISES IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THE LEASE. The Government retains the right to review and approve many aspects of the Lessor's design, including without limitation, review of the Lessor's design and construction drawings, shop drawings, product data, finish samples, and completed base building and TI construction. Such review and approval is intended to identify potential design flaws, to minimize costly misdirection of effort, and to assist the Lessor in its effort to monitor whether such design and construction comply with applicable laws and satisfy all Lease requirements.

C. Neither the Government's review, approval or acceptance of, nor payment through rent of the services required under this contract, shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the Lessor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Lessor's negligent performance of any of the services required under this Lease.

D. Design and construction and performance information is contained throughout several of the documents which comprise this Lease. The Lessor shall provide to space planners, architects, engineers, construction contractors, etc., all information required whether it is found in this Lease, special requirements and attachments, price lists, or design intent drawings. Reliance upon one of these documents to the exclusion of any other may result in an incomplete understanding of the scope of the work to be performed and/or services to be provided.

3.09 QUALITY AND APPEARANCE OF BUILDING (JUN 2012)

The Building in which the Premises are located shall be designed, built and maintained in good condition and in accordance with the Lease requirements. If not new or recent construction, the Building shall have undergone by occupancy, modernization, or adaptive reuse for office space with modern conveniences. The Building shall be compatible with its surroundings. Overall, the Building shall project a professional and aesthetically pleasing appearance including an attractive front and entrance way.

3.10 VESTIBULES (OCT 2020)

A. Vestibules shall be provided at public entrances wherever entry to the Space is directly from the outside. In the event of negative air pressure conditions, provisions shall be made for equalizing air pressure. For measurement purposes, vestibules are considered building support space and not ABOA.

B. The Lessor shall provide permanent entryway systems (such as grilles or grates) to control dirt and particulates from entering the Building at all primary exterior entryways.

3.11 MEANS OF EGRESS (MAY 2015)

A. Prior to occupancy, the Premises and any parking garage areas shall meet or will be upgraded to meet, either the applicable egress requirements in the National Fire Protection Association, Life Safety Code (NFPA 101), or the International Code Council, International Building Code (IBC), each current as of the Lease Award Date, or use an alternative approach or method that achieves an equivalent level of safety deemed acceptable by the Government.

B. The Space shall have unrestricted access to a minimum of two remote exits on each floor of Government occupancy.

C. Interlocking or scissor stairs located on the floor(s) where Space is located shall only count as one exit stair.

D. A fire escape located on the floor(s) where Space is located shall not be counted as an approved exit stair.

E. Doors shall not be locked in the direction of egress unless equipped with special locking hardware in accordance with requirements of NFPA 101 or the IBC.

3.12 AUTOMATIC FIRE SPRINKLER SYSTEM (SEP 2013)

A. Any portion of the Space located below-grade, including parking garage areas, and all areas in a Building referred to as "hazardous areas" (defined in National Fire Protection Association (NFPA) 101) that are located within the entire Building (including non-Government areas) shall be protected by an automatic fire sprinkler system or an equivalent level of safety.

B. For Buildings in which any portion of the Space is on or above the sixth floor, then, at a minimum, the Building up to and including the highest floor of Government occupancy shall be protected by an automatic fire sprinkler system or an equivalent level of safety.

C. For Buildings in which any portion of the Space is on or above the sixth floor, and lease of the Space will result, either individually or in combination with other Government Leases in the Building, in the Government leasing 35,000 or more ANSI/BOMA Office Area SF of Space in the Building, then the entire Building shall be protected throughout by an automatic fire sprinkler system or an equivalent level of safety.

D. Automatic fire sprinkler system(s) shall be installed in accordance with the requirements of NFPA 13, Standard for the Installation of Sprinkler Systems that was in effect on the actual date of installation.

E. Automatic fire sprinkler system(s) shall be maintained in accordance with the requirements of NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems (current as of the Lease Award Date).

F. "Equivalent level of safety" means an alternative design or system (which may include automatic fire sprinkler systems), based upon fire protection engineering analysis, which achieves a level of safety equal to or greater than that provided by automatic fire sprinkler systems.

3.13 FIRE ALARM SYSTEM (SEP 2013)

A. A Building-wide fire alarm system shall be installed in the entire Building in which any portion of the Space is located on the 3rd floor or higher.

B. The fire alarm system shall be installed in accordance with the requirements of NFPA 72, National Fire Alarm and Signaling Code, that was in effect on the actual date of installation.

C. The fire alarm system shall be maintained in accordance with the requirements of NFPA 72, National Fire Alarm and Signaling Code (current as of the Lease Award Date).

D. The fire alarm system shall transmit all fire alarm signals to the local fire department via any of the following means: directly to the local fire department, to the (911) public communications center, to a central station, to a remote supervising station, or to a proprietary supervising station.

E. If the Building's fire alarm control unit is over 25 years old as of the date of award of this Lease, Lessor shall install a new fire alarm system in accordance with the requirements of NFPA 72, National Fire Alarm and Signaling Code (current as of the Lease Award Date), prior to Government acceptance and occupancy of the Space.

3.14 ENERGY INDEPENDENCE AND SECURITY ACT (MAR 2016)

A. Energy-related Requirements:

1. The Energy Independence and Security Act (EISA) establishes the following requirements for Government Leases in Buildings that have not earned the ENERGY STAR® Label conferred by the Environmental Protection Agency (EPA) within one year prior to the due date for final proposal revisions ("most recent year").

2. If this Lease was awarded under any of EISA's Section 435 statutory exceptions, the Lessor shall either:

a. Earn the ENERGY STAR® Label prior to acceptance of the Space (or not later than one year after the Lease Award Date of a succeeding or superseding Lease); or

b. (i) Complete energy efficiency and conservation improvements if any, agreed to by Lessor in lieu of earning the ENERGY STAR® Label prior to acceptance of the Space (or not later than one year after the Lease Award Date of a succeeding or superseding Lease); and

(ii) Obtain and publicly disclose the Building's current ENERGY STAR® score (using EPA's Portfolio Manager tool), unless the Lessor cannot access whole building utility consumption data, or there is no building category within Portfolio Manager to benchmark against, including spaces—

I. That are located in States with privacy laws that provide that utilities shall not provide such aggregated information to multitenant building owners; and

II. For which tenants do not provide energy consumption information to the commercial building owner in response to a request from the building owner. (A Federal agency that is a tenant of the space shall provide to the building owner, or authorize the owner to obtain from the utility, the energy consumption information of the space for the benchmarking and disclosure required by this subparagraph D).

III. That cannot be benchmarked (scored) using EPA's Portfolio Manager tool because of excessive vacancy; in which case Lessor agrees to obtain the score and publicly disclose it within 120 days of the eligibility to obtain a score using the EPA Portfolio Manager tool.

Note: "public disclosure" means posting the Energy Star® score on state or local websites in those areas that have applicable disclosure mandates and reporting the score to the Government via Portfolio Manager. In the absence of an applicable state or local disclosure mandate, Lessor shall either generate and display the Energy Star® score in a public space at the building location or post the score on Lessor's or Lessor's Parent/Affiliate website.

3. If this Lease was awarded to a Building to be built or to a Building predominantly vacant as of the due date for final proposal revisions and was unable to earn the ENERGY STAR® label for the most recent year (as defined above) due to insufficient occupancy, but was able to demonstrate sufficient evidence of capability to earn the ENERGY STAR® label, then Lessor must earn the ENERGY STAR® label within 18 months after occupancy by the Government.

4. The Lessor is encouraged to purchase at least 50 percent of the Government tenant's electricity from renewable sources.

B. Hydrology-related Requirements:

1. Per EISA Section 438, the sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the Property with regard to the temperature, rate, volume, and duration of flow. If the Lessor proposes to satisfy the Government's space requirements through a development or redevelopment project, and the Government will be the sole or predominant tenant such that any other use of the Property will be functionally or quantitatively incidental to the Government's use, the Lessor is required to implement hydrology maintenance and restoration requirements as required by EISA Section 438.

a. For the purposes of applying EISA Section 438 in this Lease, "sponsor" shall mean "Lessor", and "exceeds 5,000 square feet" shall mean construction that disturbs 5,000 square feet or more of land area at the Property or on adjoining property to accommodate the Government's requirements, or at the Property for whatever reason. Information regarding implementation of the hydrology maintenance and restoration requirements can be found at: http://www.epa.gov/greeningepa/technical-guidance-implementing-stormwater-runoff-requirements-federal-projects

b. Lessor is required to implement these hydrology maintenance and restoration requirements to the maximum extent technically feasible, prior to acceptance of the Space, (or not later than one year after the Lease Award Date or Lease Term Commencement Date, whichever is later, of a succeeding or superseding Lease). Additionally, this Lease requires EISA Section 438 storm water compliance not later than one year from the date of any applicable disturbance (as defined in EISA Section 438) of more than 5,000 square feet of ground area if such disturbance occurs during the term of the Lease if the Government is the sole or predominant tenant. In the event the Lessor is required to comply with EISA Section 438, Lessor shall furnish the Government, prior to the filing for permits for the associated work, with a certification from Lessor's engineer that the design meets the hydrology maintenance and restoration requirements of EISA Section 438.

3.15 ELEVATORS (OCT 2020)

A. The Lessor shall provide suitable passenger elevator and, when required by the Government, freight elevator service to any of the Premises not having ground level access. Service shall be available during the normal hours of operation specified in the in this Lease. However, one passenger elevator and, when required by the Government, one freight elevator shall be available at all times for Government use. When a freight elevator is required by the Government, it shall be accessible to the loading areas. When possible, the Government shall be given 24-hour advance notice if the service is to be interrupted for more than 1-1/2 hours. Normal service interruption shall be scheduled outside of the Government's normal working hours. The Lessor shall also use best efforts to minimize the frequency and duration of unscheduled interruptions.

B. Code: Elevators shall conform to the requirements of the American Society of Mechanical Engineers ASME A17.1/CSA B44, Safety Code for Elevators and Escalators that were in effect based on the elevator installation date code year. Elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1/CSA B44. Fire alarm initiating devices (e.g., smoke detectors) used to initiate Phase I emergency recall operation shall be installed in accordance with the requirements of NFPA 72, National Fire Alarm and Signaling Code. The elevators shall be inspected and maintained in accordance with the current edition of the ASME A17.2, Inspector's Manual for Elevators. Except for the reference to ASME A17.1 in ABAAS, Section F105.2.2, all elevators must meet ABAAS requirements for accessibility in Sections 407, 408, and 409 of ABAAS.

C. Safety Systems: Elevators shall be equipped with telephones or other two-way emergency communication systems. The system used shall be marked and shall reach an emergency communication location staffed 24 hours per day, 7 days per week.

D. Speed: The passenger elevators shall have a capacity to transport in 5 minutes 15 percent of the normal population of all upper floors (based on 150 SF per person). Further, the dispatch interval between elevators during the up-peak demand period shall not exceed 35 seconds.

E. Interior Finishes: Elevator cab walls shall be hardwood, marble, granite, or an equivalent pre-approved by the LCO. Elevator cab floors shall be marble, granite, terrazzo, or an equivalent pre-approved by the LCO.

3.16 BUILDING DIRECTORY (APR 2011)

A tamper-proof directory with lock shall be provided in the Building lobby listing the Government agency. It must be acceptable to the LCO.

3.17 FLAGPOLE (SEP 2013)

If the Government is the sole occupant of the Building, a flagpole shall be provided at a location to be approved by the LCO. The flag of the United States of America will be provided by the Lessor, as part of shell rent, and replaced at all times during the Lease term when showing signs of wear.

3.18 DEMOLITION (JUN 2012)

The Lessor shall remove existing abandoned electric, telephone, and data cabling and devices, as well as any other improvements or fixtures in place to accommodate the Government's requirements. Any demolition of existing improvements that is necessary to satisfy the Government's layout shall be done at the Lessor's expense.

3.19 ACCESSIBILITY (FEB 2007)

The Building, leased Space, and areas serving the leased Space shall be accessible to persons with disabilities in accordance with the Architectural Barriers Act Accessibility Standard (ABAAS), Appendices C and D to 36 CFR Part 1191 (ABA Chapters 1 and 2, and Chapters 3 through 10). To the extent the standard referenced in the preceding sentence conflicts with local accessibility requirements, the more stringent shall apply.

3.20 CEILINGS (OCT 2019)

A complete acoustical ceiling system (which includes grid and lay-in tiles or other Building standard ceiling system as approved by the LCO) throughout the Space and Premises shall be required. The acoustical ceiling system shall be furnished, installed, and coordinated with TIs.

A. Ceilings shall be at a minimum 9 feet and 0 inches and no more than 12 feet and 0 inches measured from floor to the lowest obstruction. Areas with raised flooring shall maintain these ceiling-height limitations above the finished raised flooring. Bulkheads and hanging or surface mounted light fixtures which impede traffic ways shall be avoided. Ceilings shall be uniform in color and appearance throughout the Space, with no obvious damage to tiles or grid.

B. Prior to closing the ceiling, the Lessor shall coordinate with the Government for the installation of any items above the ceiling.

C. Should the ceiling be installed in the Space prior to construction of the TIs, then the Lessor shall be responsible for all costs in regard to the disassembly, storage during construction, and subsequent re-assembly of any of the ceiling components which may be required to complete the TIs. The Lessor shall also bear the risk for any damage to the ceiling or any components thereof during the construction of the TIs.

D. Ceilings shall be a flat plane in each room and shall be suspended and finished as follows unless an alternate equivalent is pre-approved by the LCO:

1. Restrooms. Plastered or spackled and taped gypsum board.

2. Offices and conference rooms. Mineral and acoustical tile or lay in panels with textured or patterned surface and tegular edges or an equivalent pre-approved by the LCO. For leases 10,000 RSF or greater, newly installed tiles or panels shall meet applicable, statutory environmentally preferable criteria related to biobased content as outlined under the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1732/ACOUSTICAL-CEILING-TILES/0?ADDON=FALSE.

3. Corridors and eating/galley areas. Plastered or spackled and taped gypsum board or mineral acoustical tile.

3.21 EXTERIOR AND COMMON AREA DOORS AND HARDWARE (SEP 2013)

A. Exterior Building doors and doors necessary to the lobbies, common areas, and core areas shall be required. This does not include suite entry or interior doors specific to TIs.

B. Exterior doors shall be weather tight and shall open outward. Hinges, pivots, and pins shall be installed in a manner which prevents removal when the door is closed and locked. These doors shall have a minimum clear opening of 32" clear wide x 80" high (per leaf). Doors shall be heavy duty, flush, (1) hollow steel construction, (2) solid core wood, or (3) insulated tempered glass. As a minimum requirement, hollow steel doors shall be fully insulated, flush, #16-gauge hollow steel. Solid-core wood doors and hollow steel doors shall be at least 1-3/4 inches thick. Door assemblies shall be of durable finish and shall have an aesthetically pleasing appearance acceptable to the LCO. The opening dimensions and operations shall conform to the governing building, fire safety, accessibility, and energy codes and/or requirements. Fire door assemblies shall be listed and labeled. Labels on fire door assemblies shall be maintained in a legible condition. Fire door assemblies and their accompanying hardware, including frames and closing devices shall be installed in accordance with the requirements of NFPA 80, Standard for Fire Doors and Other Opening Protectives.

C. Exterior doors and all common area doors shall have door handles or door pulls with heavyweight hinges. All doors shall have corresponding doorstops (wall or floor mounted) and silencers. All public use doors and restroom doors shall be equipped with kick plates. All doors shall have automatic door closers. All Building exterior doors shall have locking devices installed to reasonably deter unauthorized entry.

3.22 DOORS: IDENTIFICATION (APR 2011)

All signage required in common areas unrelated to tenant identification shall be provided and installed by the Lessor.

3.23 WINDOWS (OCT 2020)

A. Office Space shall have windows in each exterior bay unless waived by the LCO.

B. All exterior window assemblies shall be weather resistant and water tight. Operable windows that open shall be equipped with secure latches. Off-street, ground-level windows and those accessible from adjacent roofs and other structures that can be opened must be fitted with a secure latch. Windows intended for use as a secondary means of egress must be openable from the egress side (e.g., inside) of the Building without the use of a key, tool, or special knowledge or effort for operation from the egress side.

3.24 PARTITIONS: GENERAL (OCT 2019)

A. Partitions in public areas shall be marble, granite, hardwood, or drywall covered with durable wall covering or high performance coating, or equivalent pre-approved by the LCO.

B. For leases 10,000 RSF or greater where the Government is a sole tenant of the Building, the Lessor is encouraged to use materials for newly installed gypsum board meeting applicable environmentally preferable criteria that are recommended in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1735/WALLBOARDGYPSUM-BOARDDRYWALL/0?ADDON=FALSE.

3.25 PARTITIONS: PERMANENT (OCT 2019)

A. Permanent partitions shall extend from the structural floor slab to the structural ceiling slab. They shall be provided by the Lessor as part of shell rent as necessary to surround the Space, stairs, corridors, elevator shafts, restrooms, all columns, and janitor closets. They shall have a flame spread rating of 25 or less and a smoke development rating of 450 or less (ASTM E-84). Stairs, elevators, and other floor openings shall be enclosed by partitions and shall have the fire resistance required by the applicable building code, fire code and ordinances adopted by the jurisdiction in which the Building is located (such as the International Building Code, etc.) current as of the Lease Award Date.

B. For leases 10,000 RSF or greater where the Government is a sole tenant of the Building, the Lessor is encouraged to use materials for newly installed gypsum board meeting the applicable environmentally preferable criteria that are recommended in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1735/WALLBOARDGYPSUM-BOARDDRYWALL/0?ADDON=FALSE.

3.26 INSULATION: THERMAL, ACOUSTIC, AND HVAC (OCT 2019)

A. No insulation installed with this project shall be material manufactured using chlorofluorocarbons (CFCs), nor shall CFCs be used in the installation of the product.

B. All insulation containing fibrous materials exposed to air flow shall be rated for that exposure or shall be encapsulated.

C. Insulating properties for all materials shall meet or exceed applicable industry standards. Polystyrene products shall meet American Society for Testing and Materials (ASTM) C578 91.

D. All insulation shall contain low emitting volatiles and not result in indoor air levels above 0.016 parts per million (ppm) of formaldehyde.

E. The maximum flame spread and smoke developed index for insulation shall meet the requirements of the applicable local codes and ordinances (current as of the Lease Award Date) adopted by the jurisdiction in which the Building is located.

F. For leases 10,000 RSF or greater, all insulation products shall meet applicable, statutory environmentally preferable criteria related to recovered material content as outlined in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/1/CONSTRUCTION-MATERIALS/22/BUILDING-INSULATION/0.

3.27 WALL FINISHES – SHELL (SEP 2015)

A. All restrooms within the Building common areas of Government-occupied floors shall have 1) ceramic tile, recycled glass tile, or comparable wainscot from the finished floor to a minimum height of 4'-6" and 2) semigloss paint on remaining wall areas, or other finish approved by the Government.

B. All elevator areas that access the Space and hallways accessing the Space shall be covered with wall coverings not less than 20 ounces per square yard, high performance paint, or an equivalent.

3.28 PAINTING – SHELL (OCT 2019)

A. The Lessor shall bear the expense for all painting associated with the Building shell. These areas shall include all common areas. Exterior perimeter walls and interior core walls within the Space shall be spackled and prime painted. If any Building shell areas are already painted prior to TIs, then the Lessor shall repaint, at the Lessor's expense, as necessary during TIs.

B. The costs for cyclical painting requirements as outlined in Section 6 shall be included in the shell rent.

C. For leases 10,000 RSF or greater, primer shall meet applicable, statutory environmentally preferable criteria related to biobased and recovered material content as outlined in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1338/PAINT/0?ADDON=FALSE.

3.29 FLOORS AND FLOOR LOAD (OCT 2019)

A. All adjoining floor areas shall be of a common level not varying more than 1/4 inch over a 10-foot horizontal run in accordance with the American Concrete Institute standards, non-slip, and acceptable to the LCO.

B. Under-floor surfaces shall be smooth and level. Office areas shall have a minimum live load capacity of 50 pounds per ABOA SF plus 20 pounds per ABOA SF for moveable partitions. Storage areas shall have a minimum live load capacity of 100 pounds per ABOA SF, including moveable partitions. Lessor may be required to provide a report by a registered structural engineer showing the floor load capacity, at the Lessor's expense. Calculations and structural drawings may also be required.

3.30 FLOOR COVERING AND PERIMETERS – SHELL (SEP 2013)

A. Exposed interior floors in primary entrances and lobbies shall be marble, granite, or terrazzo. Exposed interior floors in secondary entrances, elevator lobbies, and primary interior corridors shall be high-grade carpet, marble, granite, or terrazzo. Resilient flooring shall be used in telecommunications rooms. Floor perimeters at partitions shall have wood, rubber, vinyl, marble, or carpet base.

B. Terrazzo, unglazed ceramic tile, recycled glass tile, and/or quarry tile shall be used in all restroom and service areas of Government-occupied floors.

C. Any alternate flooring must be pre-approved by the LCO.

D. The costs for cyclical carpet replacement requirements as outlined in Section 6 shall be included in the shell rent.

3.31 MECHANICAL, ELECTRICAL, PLUMBING: GENERAL (APR 2011)

The Lessor shall provide and operate all Building equipment and systems in accordance with applicable technical publications, manuals, and standard procedures. Mains, lines, and meters for utilities shall be provided by the Lessor. Exposed ducts, piping, and conduits are not permitted in office Space.

3.32 BUILDING SYSTEMS (APR 2011)

Whenever requested, the Lessor shall furnish to GSA as part of shell rent, a report by a registered professional engineer(s) showing that the Building and its systems as designed and constructed will satisfy the requirements of this Lease.

3.33 ELECTRICAL (OCT 2019)

A. The Lessor shall be responsible for meeting the applicable requirements of local codes and ordinances. When codes conflict, the more stringent standard shall apply. Main service facilities shall be enclosed. The enclosure may not be used for storage or other purposes and shall have door(s) fitted with an automatic deadlocking latch bolt with a minimum throw of 1/2 inch. Main distribution for standard office occupancy shall be provided at the Lessor's expense. The electrical distribution panels enclosed in the electrical room shall include: single-phase 120/240 volt or 3-phase 120/208 volt service for leased spaces under 10,000 RSF; 3-phase 120/208 volt service for leased spaces between 10,000 and 25,000 RSF; and 3-phase 277/480 volt and 3-phase120/208 volt service for leases spaces over 25,000 RSF. In no event shall such power distribution (not including lighting and HVAC) for the Space fall below 4 watts per ABOA SF.

B. Main power distribution switchboards and distribution and lighting panel boards shall be circuit breaker type with copper buses that are properly rated to provide the calculated fault circuits. All power distribution panel boards shall be supplied with separate equipment ground buses. All power distribution equipment shall be required to handle the actual specified and projected loads and 10 percent spare load capacity. Distribution panels are required to accommodate circuit breakers for the actual calculated needs and 10 percent spare circuits that will be equivalent to the majority of other circuit breakers in the panel system. Fuses and circuit breakers shall be plainly marked or labeled to identify circuits or equipment supplied through them.

C. Convenience outlets shall be installed in accordance with NFPA Standard 70, National Electrical Code, or local code, whichever is more stringent. The Lessor shall provide duplex utility outlets in restrooms, corridors, and dispensing areas.

3.34 ~~ADDITIONAL ELECTRICAL CONTROLS (JUN 2012)~~ INTENTIONALLY DELETED

3.35 PLUMBING (JUN 2012)

The Lessor shall include the cost of plumbing in common areas. Hot and cold water risers and domestic waste and vent risers, installed and ready for connections that are required for TIs, shall be included in the shell rent.

3.36 DRINKING FOUNTAINS (OCT 2018)

On each floor of Government-occupied Space, the Lessor shall provide a minimum of two drinking fountains with chilled potable water within 200 feet of travel from any Government-occupied area on the floor. The fountains shall comply with Section F211 of the Architectural Barriers Act Accessibility Standard. Potable is defined as water meeting current EPA primary drinking water standards or more stringent, applicable state or local regulations. The Lessor shall serve as first responder to any occupant complaints about drinking water. The Lessor shall promptly investigate any such complaints and implement the necessary controls to address the complaints and maintain potable water conditions.

3.37 RESTROOMS (OCT 2020)

A. If this Lease is satisfied by new construction or by renovations that include the construction of restrooms, Lessor shall provide water closets, sinks and urinals on each floor that is partially or fully occupied by the government per the schedule below. The schedule is per floor and based on a density of one person for each 135 ABOA SF of office Space, allocated as 50% women and 50% men. If future renovations requiring restroom construction occur during the term of this Lease, the number of fixtures then must meet the schedule as part of the major alterations.

ESTIMATED NUMBER OF EACH GENDER PER FLOOR			(WOMEN'S) WATER CLOSETS	(WOMEN'S) SINKS	(MEN'S) WATER CLOSETS	(MEN'S) URINALS	(MEN'S) SINKS
1	to	8	2	1	1	1	1
9	to	24	3	2	2	1	1
25	to	36	3	2	2	1	2
37	to	56	5	3	3	2	2
57	to	75	6	4	4	2	2
76	to	96	6	5	4	2	3
97	to	119	7	5	5	2	3
120	to	134	9	5	6	3	4
Above 135			3/40	1/24	1/20	1/40	1/30

B. If no new construction of a restroom is occurring, at a minimum, separate restroom facilities for men and women shall be provided with sufficient fixtures (water closets, sinks and urinals), in accordance with local code or ordinances.

C. Each restroom shall have water closets enclosed with modern stall partitions and doors, urinals (in men's room), and hot (set in accordance with applicable building codes) and cold water. Water closets and urinals shall not be visible when the exterior door is open. These facilities shall be located on each floor occupied by the Government in the Building and shall be located so that employees will not be required to travel more than 200 feet on one floor to reach the restrooms.

D. Restrooms must meet ABAAS requirements as stated under this Lease.

E. Each main restroom shall contain the following:

1. A mirror and shelf above the lavatory.
2. A toilet paper dispenser in each water closet stall that will hold at least two rolls and allow easy, unrestricted dispensing.
3. A coat hook on the inside face of the door to each water closet stall and on several wall locations by the lavatories.
4. At least one modern paper towel dispenser, soap dispenser, and waste receptacle for every two lavatories.
5. A coin-operated sanitary napkin dispenser in women's restrooms with a waste receptacle in each water closet stall.
6. A disposable toilet seat cover dispenser.
7. A counter area of at least 2 feet, 0 inches in length, exclusive of the lavatories (however, it may be attached to the lavatories) with a mirror above and a ground-fault interrupter-type convenience outlet located adjacent to the counter area. The counter should be installed to minimize pooling or spilling of water at the front edge.
8. A floor drain.
9. Newly installed restroom partitions shall be made from recovered materials as listed in EPA's CPG.

3.38 PLUMBING FIXTURES: WATER CONSERVATION (OCT 2019)

For leases 10,000 RSF or greater, the specifications listed below apply:

1. New installations of plumbing fixtures,
2. Replacement of existing plumbing fixtures, or
3. Existing non-conforming fixtures where the Government occupies the full floor.

A. Water closets must conform to EPA WaterSense or fixtures with equivalent flush volumes must be utilized.

B. Urinals must conform to EPA WaterSense or fixtures with equivalent flush volumes must be utilized. Waterless urinals are acceptable.

C. Faucets must conform to EPA WaterSense or fixtures with equivalent flow rates must be utilized.

Information on EPA WaterSense fixtures can be found at HTTP://WWW.EPA.GOV/WATERSENSE/.

3.39 JANITOR CLOSETS (SEP 2015)

Janitor closets shall meet all local codes and ordinances. When not addressed by local code, Lessor shall provide containment drains plumbed for appropriate disposal of liquid wastes in spaces where water and chemical concentrate mixing occurs for maintenance purposes. Disposal is not permitted in restrooms.

3.40 HEATING, VENTILATION, AND AIR CONDITIONING - SHELL (OCT 2020)

A. Central HVAC systems shall be installed and operational, including, as appropriate, main and branch lines, VAV boxes, dampers, flex ducts, and diffusers, for an open office layout, including all Building common areas. The Lessor shall provide conditioned air through medium pressure duct

work at a rate of .75 cubic feet per minute per ABOA SF and systems shall be designed with sufficient systems capacity to meet all requirements in this Lease.

B. Areas having excessive heat gain or heat loss, or affected by solar radiation at different times of the day, shall be independently controlled.

C. Equipment Performance. Temperature control for office Spaces shall be provided by concealed central heating and air conditioning equipment. The equipment shall maintain Space temperature control over a range of internal load fluctuations of plus 0.5 W/SF to minus 1.5 W/SF from initial design requirements of the tenant.

D. Ductwork Re-use and Cleaning. Any ductwork to be reused and/or to remain in place shall be cleaned, tested, and demonstrated to be clean in accordance with the standards set forth by NADCA. The cleaning, testing, and demonstration shall occur immediately prior to Government occupancy to avoid contamination from construction dust and other airborne particulates.

E. During working hours in periods of heating and cooling, ventilation shall be provided in accordance with American National Standards Institute, American Society of Heating, Refrigeration and Air-Conditioning Engineers (ANSI/ASHRAE) Standard 62.1, Ventilation for Acceptable Indoor Air Quality that corresponds with how the HVAC system was designed to perform. At a minimum, Lessor must meet ASHRAE Standard 62.1-2004.

F. Heating and air-conditioning air distribution systems (air handling units, VAV boxes, fan coil units, etc.) for the Space shall be equipped with particulate matter air filters that meet the Minimum Efficiency Reporting Value (MERV) specified in the ANSI/ASHRAE Standard 62.1 version referenced in sub-paragraph E above. Locations that do not meet the EPA National Ambient Air Quality Standards (NAAQS) for particulates (PM 10 or PM 2.5) must be equipped with additional filtration on outdoor air intakes as required in ANSI/ASHRAE Standard 62.1. NAAQS information can be found at HTTPS://WWW.EPA.GOV/GREEN-BOOK.

G. Restrooms shall be properly exhausted, with a minimum of 10 air changes per hour.

H. INTENTIONALLY DELETED

3.41 TELECOMMUNICATIONS: DISTRIBUTION AND EQUIPMENT (SEP 2015)

A. Sufficient space shall be provided on the floor(s) where the Government occupies Space for the purposes of terminating telecommunications service into the Building. The Building's telecommunications closets located on all floors shall be vertically-stacked. Telecommunications switch rooms, wire closets, and related spaces shall be enclosed. The enclosure shall not be used for storage or other purposes and shall have door(s) fitted with an automatic door-closer and deadlocking latch bolt with a minimum throw of 1/2 inch. The telephone closets shall include a telephone backboard.

B. Telecommunications switch rooms, wire closets, and related spaces shall meet applicable Telecommunications Industry Association (TIA) and Electronic Industries Alliance (EIA) standards. These standards include the following:

1. TIA/EIA-568, Commercial Building Telecommunications Cabling Standard,
2. TIA/EIA 569, Commercial Building Standard for Telecommunications Pathways and Spaces,
3. TIA/EIA-570, Residential and Light Commercial Telecommunications Wiring Standard, and
4. TIA/EIA-607, Commercial Building Grounding and Bonding Requirements for Telecommunications Standard.

C. Telecommunications switch rooms, wire closets, and related spaces shall meet applicable NFPA standards. Bonding and grounding shall be in accordance with NFPA Standard 70, National Electrical Code, and other applicable NFPA standards and/or local code requirements.

3.42 TELECOMMUNICATIONS: LOCAL EXCHANGE ACCESS (JUN 2012)

A. The Government may elect to contract its own telecommunications (voice, data, video, Internet or other emerging technologies) service in the Space. The Government may contract with one or more parties to have INS wiring (or other transmission medium) and telecommunications equipment installed.

B. The Lessor shall allow the Government's designated telecommunications providers access to utilize existing Building wiring to connect its services to the Government's Space. If the existing Building wiring is insufficient to handle the transmission requirements of the Government's designated telecommunications providers, the Lessor shall provide access from the point of entry into the Building to the Government's floor Space, subject to any inherent limitations in the pathway involved.

C. The Lessor shall allow the Government's designated telecommunications providers to affix telecommunications antennas (high frequency, mobile, microwave, satellite, or other emerging technologies), subject to weight and wind load conditions, to roof, parapet, or Building envelope as required. Access from the antennas to the Premises shall be provided.

D. The Lessor shall allow the Government's designated telecommunications providers to affix antennas and transmission devices throughout the Space and in appropriate common areas frequented by the Government's employees to allow the use of cellular telephones and communications devices necessary to conduct business.

3.43 LIGHTING: INTERIOR AND PARKING - SHELL (OCT 2020)

NOTE: FOR PRICING ESTIMATING PURPOSES, FIXTURES WILL BE INSTALLED AT THE AVERAGE RATIO OF 1 FIXTURE PER 80 ABOA SF.

A. INTERIOR FIXTURES: High efficiency T-8, T-5, or LED light fixtures (and associated ballasts or drivers) shall be installed as either ceiling grid or pendant mounted for an open-office plan. Ceiling grid fixtures shall be either 2' wide by 4' long or 2' wide by 2' long. Lessor shall provide, as part of Shell Rent, a minimum overall lighting fixture efficiency of 85 percent. Lamps shall maintain a uniform color level throughout the lease term.

B. LIGHTING LEVELS WITH TASK LIGHTING: Fixtures shall have a minimum of two tubes and shall provide 30 foot-candles at desktop level (30" above finished floor) with a maximum uniformity ratio of 1.5:1 for 33 percent of the total Space, and 50 foot-candles at desktop level (30" above finished floor) with a maximum uniformity ratio of 1.5:1 for 67 percent of the Space. Lessor shall provide, as part of Shell Rent, 10 average foot-candles in all other Building areas within the Premises with a uniformity ratio of 4:1. Emergency egress lighting levels shall be provided in accordance with the local applicable building codes (but not less than 1 foot-candle) by either an onsite emergency generator or fixture mounted battery packs.

C. POWER DENSITY:

Existing Buildings: The maximum fixture power density shall not exceed 1.4 watts per ABOA SF.
New Construction: The maximum fixture power density shall not exceed 1.1 watts per ABOA SF.

D. DAYLIGHTING CONTROLS: If the Lease is more than 10,000 ABOA SF, the Lessor shall provide daylight dimming controls in atriums or within 15 feet of windows and skylights where daylight can contribute to energy savings. Daylight harvesting sensing and controls shall be either integral to the fixtures or ceiling mounted and shall maintain required lighting levels in work spaces.

E. OCCUPANCY/VACANCY SENSORS: The Lessor shall provide ceiling mount occupancy sensors, or vacancy sensors (preferred), or scheduling controls through the building automation system (BAS) throughout the Space in order to reduce the hours that the lights are on when a particular space is unoccupied. No more than 1,000 square feet shall be controlled by any one sensor. Occupancy sensors in enclosed rooms shall continue to operate after the BAS has shut down the building at the end of the workday.

F. BUILDING PERIMETER:

1. Exterior parking areas, vehicle driveways, pedestrian walks, and the Building perimeter lighting levels shall be designed per Illuminating Engineering Society (IES) standards. Provide 5 foot-candles for doorway areas, 3 foot-candles for transition areas and at least 1 foot-candle at the surface throughout the parking lot. Parking lot fixtures shall provide a maximum to minimum uniformity ratio of 15:1 and a maximum to average uniformity ratio of 4:1.

2. If the leased space is 100 percent occupied by Government tenants, all exterior parking lot fixtures shall be "Dark Sky" compliant with no property line trespass.

G. PARKING STRUCTURES: The minimum illuminance level for parking structures is 5 foot-candles as measured on the floor with a uniformity ratio of 10:1.

H. PARKING SENSORS: If the leased space is 100 percent occupied by Government tenants, exterior parking area and parking structure lighting shall be sensor or BAS controlled in order that it may be programmed to produce reduced lighting levels during non-use. This non-use time period will normally be from 11:00 pm to 6:00 am.

I. EXTERIOR POWER BACKUP**:** Exterior egress, walkway, parking lot, and parking structure lighting must have emergency power backup to provide for safe evacuation of the Building.

J. VIDEO SURVEILLANCE SYSTEM (VSS): Lighting shall be provided in such a manner to adequately support VSS operations, and not limit or preclude adequate fields of view.

3.44 ACOUSTICAL REQUIREMENTS (JUN 2012)

A. Reverberation Control. Private office and conference rooms using suspended acoustical ceilings shall have a noise reduction coefficient (NRC) of not less than 0.65 in accordance with ASTM C-423. Open office using suspended acoustical ceilings shall have an NRC of not less than 0.75. Private offices, conference rooms, and open offices using acoustical cloud or acoustical wall panels with a minimum of 70% coverage shall have an NRC of not less than 0.85.

B. Ambient Noise Control. Ambient noise from mechanical equipment shall not exceed noise criteria curve (NC) 35 in accordance with the ASHRAE Handbook of Fundamentals in offices and conference rooms; NC 40 in corridors, cafeterias, lobbies, and restrooms; NC 50 in other spaces.

C. Noise Isolation. Rooms separated from adjacent spaces by ceiling high partitions (not including doors) shall not be less than the following noise isolation class (NIC) standards when tested in accordance with ASTM E-336:

Conference rooms: NIC 40
Offices: NIC 35

D. Testing. The LCO may require, at Lessor's expense, test reports by a qualified acoustical consultant showing that acoustical requirements have been met.

3.45 ~~SECURITY FOR NEW CONSTRUCTION (OCT 2019)~~ INTENTIONALLY DELETED

3.46 ~~SEISMIC SAFETY FOR NEW CONSTRUCTION (OCT 2020)~~ INTENTIONALLY DELETED

3.47 ~~FIRE PROTECTION FOR NEW CONSTRUCTION (APR 2015)~~ INTENTIONALLY DELETED

3.48 ~~GREEN BUILDING RATING CERTIFICATION FOR NEW CONSTRUCTION (OCT 2016)~~ INTENTIONALLY DELETED

3.49 GREEN BUILDING RATING CERTIFICATION FOR TENANT INTERIORS (OCT 2016)

A. The tenant Space must meet the requirements of LEED®–ID+C--Leadership in Energy and Environmental Design for Interior Design and Construction at the Certified level, at a minimum. The Lessor, at the Lessor's expense, shall obtain certification from the USGBC (for LEED®) within 9 months of occupancy. For requirements to achieve certification, Lessor must refer to latest version at the time of submittal of the LEED®–ID+C Reference Guide (at HTTP://WWW.USGBC.ORG/). At completion of all documentation and receipt of final certification, the Lessor must provide the Government two electronic copies on compact disks of all documentation submitted to the USGBC. Acceptable file format is Adobe PDF copied to disk from the LEED®–Online workspace. In addition, the Lessor will provide the Government viewing access to the LEED®–Online workspace as applicable during design and through the term of the Lease.

B. Prior to the end of the first 9 months of occupancy, if the Lessor fails to achieve LEED® certification, the Government may assist the Lessor in implementing a corrective action program to achieve LEED® certification and deduct its costs (including administrative costs) from the rent.

C. Any Building shell modifications necessary for the Space to meet the requirements of LEED®–ID+C certification, shall be noted and incorporated into the construction documents and shall be included as part of the Building shell costs. The Lessor must coordinate TI and shell requirements as necessary to meet the certification.

3.50 INDOOR AIR QUALITY DURING CONSTRUCTION (OCT 2020)

A. The Lessor shall provide to the Government safety data sheets (SDS) or other appropriate documents upon request, but prior to installation or use for the following products, including but not limited to, adhesives, caulking, sealants, insulating materials, fireproofing or fire stopping materials, paints, carpets, floor and wall patching or leveling materials, lubricants, clear finishes for wood surfaces, janitorial cleaning products, and pest control products.

B. The LCO may eliminate from consideration products with significant quantities of toxic, flammable, corrosive, or carcinogenic material and products with potential for harmful chemical emissions. Materials used often or in large quantities will receive the greatest amount of review.

C. Where demolition or construction work occurs adjacent to occupied Space, the Lessor shall erect appropriate barriers (noise, dust, odor, etc.) and take necessary steps to minimize interference with the occupants. This includes maintaining acceptable temperature, humidity, and ventilation in the occupied areas during window removal, window replacement, or similar types of work.

D. HVAC during Construction: If air handlers are used during construction, the Lessor shall provide filtration media with a MERV of 8 at each return air grill, as determined by ANSI/ASHRAE Standard 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size.

E. Flush-Out Procedure:

1. HVAC flush-out shall commence after construction ends and the Building has been completely cleaned. All interior finishes, such as millwork, doors, paint, carpet, acoustic tiles, and movable furnishings (e.g., workstations, partitions), must be installed, and major VOC punch list items must be finished.

2. Prior to occupancy, Lessor shall install new filtration media and perform a building flush-out by supplying a total air volume of 14,000 cubic feet of outdoor air per square foot of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%.

3. If the LCO determines that occupancy is required before flush-out can be completed, the Space may be occupied only after delivery of a minimum of 3,500 cubic feet of outdoor air per square foot of gross floor area while maintaining an internal temperature of at least 60°F (15°C) and no higher than 80°F (27°C) and relative humidity no higher than 60%. Once the Space is occupied, it must be ventilated at a minimum rate of 0.30 cubic foot per minute (cfm) per square foot of outdoor air or greater. During each day of the flush-out period, ventilation must begin at least three hours before occupancy and continue during occupancy. These conditions must be maintained until a total of 14,000 cubic feet per square foot of outdoor air (4 270 liters of outdoor air per square meter) has been delivered to the space.

3.51 SYSTEMS COMMISSIONING (APR 2011)

The Lessor shall incorporate commissioning requirements to verify that the installation and performance of energy consuming systems meet the Government's project requirements. The commissioning shall cover only work associated with TIs or alterations or at a minimum: heating, ventilating, air conditioning and refrigeration (HVAC&R) systems and associated controls, lighting controls, and domestic hot water systems.

3.52 ~~DUE DILIGENCE AND NATIONAL ENVIRONMENTAL POLICY ACT REQUIREMENTS – LEASE (SEP 2014)~~ INTENTIONALLY DELETED

3.53 ~~NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS - LEASE (SEP 2014)~~ INTENTIONALLY DELETED

3.54 ~~DESIGN EXCELLENCE – LEASE (OCT 2016)~~ INTENTIONALLY DELETED

SECTION 4 DESIGN, CONSTRUCTION, AND POST AWARD ACTIVITIES

4.01 SCHEDULE FOR COMPLETION OF SPACE (OCT 2020)

Design and construction activities for the Space shall commence upon Lease award. The Lessor shall schedule the following activities to achieve timely completion of the work required by this Lease:

A. Lessor-Provided Design Intent Drawings (DIDs): The Lessor must submit to GSA, as part of the shell cost, complete DIDs conforming to the requirements of this Lease and other Government-supplied information related to the tenant agency's interior build-out requirements not later than **45** Working Days following the Lease Award Date, provided that the Government supplies such information and direction as reasonably required for Lessor to timely complete DIDs. The Government (GSA and the tenant agency) shall attend two meetings at the Lessor's request for the purpose of providing information and direction in the development of DIDs. These meetings may be held either in person or virtually, at the discretion of the Government. The Lessor should anticipate at least two submissions of DIDs before receiving approval. At the sole discretion of the Government, the Lessor may be required to submit a budget proposal based on the TIs and associated work as shown on the DIDs. This budget proposal shall be completed, as part of the shell cost, within **30** Working Days of the Government's request.

B. DIDs. For the purposes of this Lease, DIDs are defined as layout line drawings of the leased Space, reflecting all Lease requirements, showing partitions and doors; schematic demolition; voice, data, and electrical outlet locations; finishes; generic furniture layout, and any additional details necessary to communicate the design intent to the lessor's architect for the purpose of preparing the construction documents (CDs). A full DID set must include the following elements:

Level 1 (included in Shell rent):

1. Cover Sheet;
2. Demolition Plan (if applicable);
3. Construction (Partition) Plan;
4. Power/Communication (Electrical) Plan;
5. Furniture Plan; and
6. Finish Plan.

C. Government review and approval of Lessor-provided DIDs: The Government must notify the Lessor of DID approval not later than **15** Working Days following submission of DIDs conforming to the requirements of this Lease as supplied by the Government. Should the DIDs not conform to these requirements, the Government must notify the Lessor of such non-conformances within the same period; however, the Lessor shall be responsible for any delay to approval of DIDs occasioned by such non-conformance. The Government's review and approval of the DIDs is limited to conformance to the specific requirements of the Lease as they apply to the Space.

D. The Lessor's preparation and submission of construction documents (CDs): The Lessor as part of the TI must complete CDs conforming to the approved DIDs not later than **45** Working Days following the approval of DIDs. The pricing for this work is included under the A/E fees established under Section 1 of the Lease. If during the preparation of CDs the Lessor becomes aware that any material requirement indicated in the approved DIDs cannot be reasonably achieved, the Lessor shall promptly notify GSA, and shall not proceed with completion of CDs until direction is received from the LCO. The LCO shall provide direction within **10** Working Days of such notice, but the Government shall not be responsible for delays to completion of CDs occasioned by such circumstances. For the purpose of this paragraph, a "material requirement" shall mean any requirement necessary for the Government's intended use of the Space as provided for in, or reasonably inferable from, the Lease and the approved DIDs (e.g., number of workstations and required adjacencies).

E. Government review of CDs: The Government shall have **10** Working Days to review CDs before Lessor proceeds to prepare a TI price proposal for the work described in the CDs. At any time during this period of review, the Government shall have the right to require the Lessor to modify the CDs to enforce conformance to Lease requirements and the approved DIDs.

F. The Lessor's preparation and submission of the TI price proposal: The Lessor shall prepare and submit a complete TI price proposal in accordance with this Lease within **20** Working Days following the end of the Government CD review period.

G. The Lessor's preparation and submission of the BSAC price proposal: The Lessor shall prepare and submit a complete BSAC price proposal in accordance with this Lease within **20** Working Days following the end of the Government CD review period.

H. Negotiation of TI and BSAC price proposals and issuance of notice to proceed (NTP): The Government shall issue NTP within **20** Working Days following the submission of the TI and BSAC price proposals, unless these have been priced as turnkey, provided that price proposals conform to the requirements of the Lease and the parties negotiate a fair and reasonable price.

I. Construction of TIs and completion of other required construction work: The Lessor shall complete all work required to prepare the Premises as required in this Lease ready for use not later than **120** Working days following issuance of NTP.

4.02 CONSTRUCTION DOCUMENTS (SEP 2012)

The Lessor's CDs shall include all mechanical, electrical, plumbing, fire protection, life safety, lighting, structural, security, and architectural improvements scheduled for inclusion into the Space. CDs shall be annotated with all applicable specifications. CDs shall also clearly identify TIs already in place and the work to be done by the Lessor or others. Notwithstanding the Government's review of the CDs, the Lessor is solely responsible and liable for their technical accuracy and compliance with all applicable Lease requirements.

4.03 TENANT IMPROVEMENTS PRICE PROPOSAL (OCT 2020)

A. The Lessor's TI price proposal shall be supported by sufficient cost or pricing data to enable the Government to evaluate the reasonableness of the proposal, or documentation that the Proposal is based upon competitive proposals (as described below) obtained from entities not affiliated with the Lessor. Any work shown on the CDs that is required to be included in the Building shell rent or already priced as BSAC shall be clearly identified and excluded from the TI price proposal. After negotiation and acceptance of the TI price, GSA shall issue a NTP to the Lessor.

B. Under the provisions of FAR Subpart 15.4, the Lessor shall submit a TI price proposal with information that is adequate for the Government to evaluate the reasonableness of the price or determining cost realism for the TIs within the time frame specified in this section. The TI price proposal shall use the fee rates specified in the "Tenant Improvement Fee Schedule" paragraph of this Lease. The Lessor shall exclude from the TI price proposal all costs for fixtures and/or other TIs already in place, provided the Government has accepted same. However, the Lessor will be reimbursed for costs to repair or improve the fixture(s) and/or any other improvements already in place. The Lessor must provide certified cost or pricing data for TI proposals exceeding the threshold in FAR 15.403-4, to establish a fair and reasonable price. For TI proposals that do not exceed the threshold in FAR 15-403-4, the Lessor shall submit adequate documentation to support the reasonableness of the price proposal as determined by the LCO.

C. The TIs scope of work includes the Lease, the DIDs, the CDs, and written specifications. In cases of discrepancies, the Lessor shall immediately notify the LCO for resolution. All differences will be resolved by the LCO in accordance with the terms and conditions of the Lease.

D. In lieu of requiring the submission of detailed cost or pricing data as described above, the Government (in accordance with FAR 15.403) is willing to negotiate a price based upon the results of a competitive proposal process. A minimum of two qualified General Contractors (GCs) shall be invited by the Lessor to participate in the competitive proposal process. Each participant shall compete independently in the process. In the absence of sufficient competition from the GCs, a minimum of two qualified subcontractors from each trade of the Tenant Improvement Cost Summary (TICS) Table (described below) shall be invited to participate in the competitive proposal process.

E. Each TI proposal shall be (1) submitted by the proposed General Contractors (or subcontractors) using the TICS Table in CSI Masterformat (filling out all sheets, including each division tab, as necessary); (2) reviewed by the Lessor prior to submission to the Government to ensure compliance with the scope of work (specified above) and the proper allocation of shell and TI costs; and (3) reviewed by the Government. General Contractors shall submit the supporting bids from the major subcontractors along with additional backup to the TICS Table in a format acceptable to the Government.

F. Unless specifically designated in this Lease as a TI or BSAC cost, all construction costs shall be deemed to be included in the Shell Rent. Any costs in the GC's proposal for Building shell items shall be clearly identified on the TICS Table separately from the TI costs.

G. The Government reserves the right to determine if bids meet the scope of work, that the price is reasonable, and that the Lessor's proposed contractors are qualified to perform the work. The Government reserves the right to reject all bids at its sole discretion. The Government reserves the right to attend or be represented at all negotiation sessions between the Lessor and potential contractors.

H. The Lessor shall demonstrate to the Government that best efforts have been made to obtain the most competitive prices possible, and the Lessor shall accept responsibility for all prices through direct contracts with all contractors. The LCO shall issue to the Lessor a NTP with the TIs upon the Government's sole determination that the Lessor's proposal is acceptable. The Lessor shall complete the work within the time frame specified in this section of the Lease.

4.04 BUILDING SPECIFIC AMORTIZED CAPITAL (BSAC) PRICE PROPOSAL (SEP 2015)

The Lessor's BSAC price proposal shall be supported by sufficient cost or pricing data to enable the Government to evaluate the reasonableness of the proposal, or documentation that the Proposal is based upon competitive proposals. The pricing shall be submitted using the Security Unit Price List (SecUP**).**

4.05 GREEN LEASE SUBMITTALS (OCT 2019)

The Lessor shall submit to the LCO:

A. Product data sheets for floor coverings, paints and wall coverings, ceiling materials, all adhesives, wood products, suite and interior doors, subdividing partitions, wall base, door hardware finishes, window coverings, millwork substrate and millwork finishes, lighting and lighting controls, and insulation to be used within the leased Space. This information must be submitted NO LATER THAN the submission of the DIDs, if applicable.

B. SDS or other appropriate documents upon request for products listed in the Lease. All SDS shall comply with Occupational Safety and Health Administration (OSHA) requirements for the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The Lessor and its agents shall comply with all recommended measures in the SDS to protect the health and safety of personnel.

C. For leases 10,000 RSF or greater, a re-use plan, if required in accordance with the "Existing Fit-out, Salvaged, or Re-used Building Material" paragraph in the Lease.

D. If the Lessor is unable to comply with the environmentally preferable requirements stated throughout the Lease, he/she must submit a waiver request for each material within the TI pricing submittal. The waiver request shall be based on the following exceptions:

1. Product cannot be acquired competitively within a reasonable performance schedule.
2. Product cannot be acquired that meets reasonable performance requirements.
3. Product cannot be acquired at a reasonable price.

4. An exception is provided by statute.

The price shall be deemed unreasonable when the total life cycle costs are significantly higher for the sustainable product versus the non-sustainable product. Life cycle costs are determined by combining the initial costs of a product with any additional costs or revenues generated from that product during its entire life.

E. Radon test results as may be required by the "Radon in Air" and "Radon in Water" paragraphs in the Lease.

F. Construction waste management plan: For leases 10,000 RSF or greater, prior to construction commencement, a proposed plan following industry standards to recycle construction waste. The construction waste management plan shall quantify material diversion goals and maximize the materials to be recycled and/or salvaged (at least 50 percent) from construction, demolition, and packaging debris. Where the small quantity of material, the extraordinarily complex nature of the waste disposal method, or prohibitive expense for recycling would represent a genuine hardship, the Government, upon written request of the Lessor and approval of the LCO, may permit alternative means of disposal.

G. Building recycling service plan: A Building recycling service plan with floor plans annotating recycling area(s) as part of DIDs, if applicable, to be reflected on the CD submission.

H. A signed statement from the Lessor for the leased Space explaining how all HVAC systems serving the leased Space will achieve the desired ventilation of the Space during the flush-out period called for in the Lease.

I. A written commissioning plan submitted to the LCO prior to the completion of DIDs, if applicable, that includes:

1. A schedule of systems commissioning (revised as needed during all construction phases of the project, with such revisions provided to the LCO immediately); and

2. A description of how commissioning requirements will be met and confirmed.

J. At completion of LEED®, documentation and receipt of final certification, along with two electronic copies of all supporting documentation for certification on compact disk.

K. If renewable source power is purchased, documentation within 9 months of occupancy.

4.06 CONSTRUCTION SCHEDULE AND INITIAL CONSTRUCTION MEETING (OCT 2020)

The Lessor shall furnish a detailed construction schedule (such as Critical Path Method) to the Government within **5** Working Days of issuance of the NTP. Such schedule shall also indicate the dates available for Government contractors to install telephone/data lines or equipment, if needed. Within **10** Working Days of NTP, the Lessor shall initiate a construction meeting. This meeting may be held in person or virtually, at the discretion of the Government. The Lessor will have contractor representatives including its architects, engineers, general contractor and sub-contractor representatives in attendance. The Lessor shall keep meeting minutes of discussion topics and attendance.

4.07 PROGRESS REPORTS (OCT 2020)

After start of construction, the Lessor shall submit to the LCO written progress reports at intervals of **5** Working Days. Each report shall include information as to the percentage of the work completed by phase and trade; a statement as to expected completion and occupancy dates; changes introduced into the work; and general remarks on such items as material shortages, strikes, weather, etc, that may affect timely completion. In addition, at the Government's discretion, the Lessor shall conduct meetings every two weeks to brief Government personnel and/or contractors regarding the progress of design and construction of the Space. These meetings may be held in person or virtually, at the discretion of the Government. The Lessor shall be responsible for taking and distributing minutes of these meetings.

4.08 CONSTRUCTION INSPECTIONS (SEP 2015)

A. The LCO or the LCO's designated technical representative may periodically inspect construction work to review compliance with Lease requirements and approved DIDs, if applicable.

B. Periodic reviews, witnessing of tests, and inspections by the Government shall not constitute approval of the Lessor's apparent progress toward meeting the Government's objectives but are intended to discover any information which the LCO may be able to call to the Lessor's attention to prevent costly misdirection of effort. The Lessor shall remain responsible for designing, constructing, operating, and maintaining the Building in full accordance with the requirements of the Lease.

4.09 ACCESS BY THE GOVERNMENT PRIOR TO ACCEPTANCE (SEP 2013)

The Government shall have the right to access any space within the Building during construction for the purposes of performing inspections or installing Government furnished equipment. The Government shall coordinate the activity of Government contractors with the Lessor to minimize conflicts with and disruption to other contractors on site. Access shall not be unreasonably denied to authorized Government officials including, but not limited to, Government contractors, subcontractors, or consultants acting on behalf of the Government on this project.

4.10 ACCEPTANCE OF SPACE AND CERTIFICATE OF OCCUPANCY (SEP 2015)

A. Ten (10) Working Days prior to the completion of the Space, the Lessor shall issue written notice to the Government to schedule the inspection of the Space for acceptance. The Government shall accept the Space only if the construction of Building shell and TIs conforming to this Lease and the

approved DIDs, if applicable, is substantially complete, a Certificate of Occupancy (C of O) has been issued as set forth below, and the Building improvements necessary for acceptance as described in the paragraph "Building Improvements" are completed.

B. The Space shall be considered substantially complete only if the Space may be used for its intended purpose, and completion of remaining work will not interfere unreasonably with the Government's enjoyment of the Space. Acceptance shall be final and binding upon the Government with respect to conformance of the completed TIs to the approved DIDs, with the exception of items identified on a punch list generated as a result of the inspection, concealed conditions, latent defects, or fraud, but shall not relieve the Lessor of any other Lease requirements.

C. The Lessor shall provide a valid C of O, issued by the local jurisdiction, for the intended use of the Government. If the local jurisdiction does not issue C of O's or if the C of O is not available, the Lessor may satisfy this condition by providing a report prepared by a licensed fire protection engineer that indicates the Space and Building are compliant with all applicable local codes and ordinances and all fire protection and life safety-related requirements of this Lease.

D. The Government will not be required to accept space prior to the schedule outlined in this Lease.

4.11 LEASE TERM COMMENCEMENT DATE AND RENT RECONCILIATION (JUN 2012)

At acceptance, the Space shall be measured in accordance with the standards set forth in this Lease to determine the total ABOA SF in the Space. The rent for the Space will be adjusted based upon the measured ABOA square footage as outlined under the Payment clause of the General Clauses. At acceptance, the Lease term shall commence. The Lease Term Commencement Date, final measurement of the Premises, reconciliation of the annual rent, and amount of Commission Credit, if any, shall be memorialized by Lease Amendment.

4.12 AS-BUILT DRAWINGS (OCT 2019)

Not later than **45** days after the acceptance of the Space, the Lessor, at Lessor's expense, shall furnish to the Government a complete set of Computer Aided Design (CAD) files of as-built floor plans showing the Space under Lease, as well as corridors, stairways, and core areas. As-built drawings shall include those for Civil, Architectural, Mechanical, Electrical, and Plumbing features, including, but not limited to, those for IT, Communications, Security, and Fire Protection. The plans shall have been generated by a CAD program which is compatible with the latest release of AutoCAD. The required file extension is ".DWG." Clean and purged files shall be submitted in a digital format. They shall be labeled with Building name, address, list of drawing(s), date of the drawing(s), and Lessor's architect and architect's phone number. The Lessor's operator shall demonstrate the submission on GSA equipment, if requested by the LCO.

4.13 ~~LIQUIDATED DAMAGES (JUN 2012)~~ INTENTIONALLY DELETED

4.14 ~~SEISMIC RETROFIT (SEP 2013)~~ INTENTIONALLY DELETED

4.15 LESSOR'S PROJECT MANAGEMENT RESPONSIBILITIES (OCT 2020)

A. The Lessor's project management fee shall cover all of the Lessor's project management costs associated with the delivery of Tenant Improvements, including, but not limited to:

1. Legal fees
2. Travel costs
3. Insurance
4. Home office overhead and other indirect costs
5. Carrying costs, exclusive of the TI amortization rate. Carrying costs are those costs of capital incurred for the delivery of TI, for the period starting from Lessor's outlay of funds, until the Lease Term Commencement Date.
6. Municipal, county, or state fees (not related to sales tax or construction permits associated with TI buildout)
7. TI proposal preparation costs
8. Lessor's labor costs related to the management of the TI build-out.

B. At a minimum, the Lessor shall be responsible for performing the following services:

1. Provide assistance and expertise to the Government project team in the form of coordination, management, and administration of the design and construction process;
2. Monitor performance of the general contractor and other contractors, control schedules, and oversee financial accounts;
3. Conduct and document design and construction project meetings;
4. Perform administrative tasks, including documentation, record keeping (issuing meeting minutes), and payment validation in addition to submittal and change order processing;
5. Maintain Request for Information (RFI), submittal, and change order logs; and
6. Provide technical expertise (e.g. testing, estimating, resolving claims, or responding to inquiries).

SECTION 5 TENANT IMPROVEMENT COMPONENTS

5.01 TENANT IMPROVEMENT REQUIREMENTS (OCT 2016)

The TIs shall be designed, constructed, and maintained in accordance with the standards set forth in this Lease. For pricing, only those requirements designated within this Section 5, or designated as TIs within the attached agency requirements and Security Requirements, shall be deemed to be TI costs.

5.02 ~~TENANT IMPROVEMENT SPECIFICATIONS (SEP 2015)~~ INTENTIONALLY DELETED

5.03 FINISH SELECTIONS (SEP 2015)

The Lessor must consult with the Government prior to developing a minimum of three (3) finish options to include coordinated samples of finishes for all interior elements such as paint, wall coverings, base coving, carpet, window treatments, laminates, and flooring. All samples provided must comply with specifications set forth elsewhere in this Lease. All required finish option samples must be provided at no additional cost to the Government within 10 Working Days after initial submission of DIDs, if applicable. GSA must deliver necessary finish selections to the Lessor within 10 Working Days after receipt of samples. The finish options must be approved by GSA prior to installation. The Lessor may not make any substitutions after the finish option is selected.

5.04 WINDOW COVERINGS (JUN 2012)

A. Window Blinds. All exterior windows shall be equipped with window blinds in new or like new condition, which shall be provided as part of the TIs. The blinds may be aluminum or plastic vertical blinds, horizontal blinds with aluminum slats of one-inch width or less, solar fabric roller shades, or an equivalent product pre-approved by the Government. The window blinds shall have non-corroding mechanisms and synthetic tapes. Color selection will be made by the Government.

B. INTENTIONALLY DELETED

5.05 DOORS: SUITE ENTRY (OCT 2019)

A. Suite entry doors shall be provided as part of the TIs and shall have a minimum clear opening of 32" wide x 84" high (per leaf). Doors shall meet the requirements of being a flush, solid core, 1-3/4-inch thick, wood door with a natural wood veneer face or an equivalent pre-approved by the Government. Hollow core wood doors are not acceptable. They shall be operable by a single effort; and shall meet the requirement of NFPA 101, Life Safety Code or the International Building Code (current as of the Lease Award Date). Doors shall be installed in a metal frame assembly which is primed and finished with a low VOC semi gloss oil-based paint finish that does not result in indoor air quality levels above 0.016 parts per million (ppm) of formaldehyde.

B. For leases 10,000 RSF or greater, the paint finish must meet applicable, statutory environmentally preferable criteria related to biobased and recovered material content as outlined in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1338/PAINT/0?ADDON=FALSE.

5.06 DOORS: INTERIOR (OCT 2019)

A. Doors within the Space shall be provided as part of the TIs and shall have a minimum clear opening of 32" wide x 80" high. Doors shall be flush, solid core, wood with a natural wood veneer face or an equivalent door pre-approved by the LCO. Hollow core wood doors are not acceptable. They shall be operable with a single effort, and shall meet the requirements of NFPA 101, Life Safety Code or the International Building Code (current as of the Lease Award Date). Doors shall be installed in a metal frame assembly which is primed and finished with a low VOC semi-gloss oil-based paint and which does not result in indoor air quality levels above 0.016 parts per million (ppm) of formaldehyde.

B. For leases 10,000 RSF or greater, the paint finish must meet applicable, statutory environmentally preferable criteria related to biobased and recovered material content as outlined in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1338/PAINT/0?ADDON=FALSE.

5.07 DOORS: HARDWARE (SEP 2013)

Doors shall have door handles or door pulls with heavyweight hinges. The Lessor is encouraged to avoid the use of chrome-plated hardware. All doors shall have corresponding doorstops (wall- or floor-mounted) and silencers. All door entrances leading into the Space from public corridors and exterior doors shall have automatic door closers. Doors designated by the Government shall be equipped with 5-pin, tumbler cylinder locks and strike plates. All locks shall be master keyed. Furnish at least two master keys for each lock to the Government. Any exterior entrance shall have a high security lock, with appropriate key control procedures, as determined by Government specifications. Hinge pins and hasps shall be secured against unauthorized removal by using spot welds or pinned mounting bolts. The exterior side of the door shall have a lock guard or astragal to prevent tampering of the latch hardware. Doors used for egress only shall not have any operable exterior hardware. All security-locking arrangements on doors used for egress shall comply with requirements of NFPA 101or the International Building Code current as of the Lease Award Date.

5.08 DOORS: IDENTIFICATION (JUN 2012)

Door identification shall be installed in approved locations adjacent to office entrances as part of the TIs. The form of door identification shall be approved by the Government.

5.09 PARTITIONS: SUBDIVIDING (OCT 2020)

A. Office subdividing partitions shall comply with applicable building codes and local requirements and ordinances and shall be provided as part of the TIs. Partitioning shall extend from the finished floor to the finished ceiling and shall be designed to provide a minimum sound transmission class (STC) of 37. Partitioning shall be installed by the Lessor at locations to be determined by the Government as identified in the DIDs, if applicable. They shall have a flame spread rating of 25 or less and a smoke development rating of 450 or less (ASTM E-84).

B. HVAC shall be rebalanced and lighting repositioned, as appropriate, after installation of partitions.

C. If installed in accordance with the "Automatic Fire Sprinkler System" and "Fire Alarm System" paragraphs, sprinklers and fire alarm notification appliances shall be repositioned as appropriate after installation of partitions to maintain the level of fire protection and life safety.

D. Partitioning requirements may be satisfied with existing partitions if they meet the Government's standards and layout requirements.

E. For leases 10,000 RSF or greater where the Government is a sole tenant of the Building, the Lessor is encouraged to use materials for newly installed gypsum board meeting applicable environmentally preferable criteria that are recommended in the Green Procurement Compilation at HTTPS://SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1735/WALLBOARDGYPSUM-BOARDDRYWALL/0?ADDON=FALSE.

5.10 WALL FINISHES (OCT 2019)

If the Government chooses to install a wall covering, the following specifications shall apply:

A. Commercial grade, weighing not less than 13 ounces per square yard.

B. For leases 10,000 RSF or greater, wall covering shall be vinyl-free, chlorine-free, plasticizer-free, with recycled or bio-based content. If the Government chooses to install a high-performance paint coating, it shall comply with the VOC limits of the Green Seal Standard GS-11.

5.11 PAINTING – TI (OCT 2019)

A. Prior to acceptance, all surfaces within the Space which are designated by GSA for painting shall be newly finished in colors and type of paint acceptable to the Government.

B. For leases 10,000 RSF or greater, the Lessor shall provide interior paints, primers, coatings, stains, and sealers that meet applicable, statutory, environmentally preferable criteria for biobased and recovered material content as outlined under the Green Procurement Compilation at HTTPS://SFTOOL.GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1338/PAINT/0?ADDON=FALSE. The Lessor shall use reprocessed latex paint in accordance with EPA's CPG (Comprehensive Procurement Guidelines) on all painted surfaces where feasible.

5.12 FLOOR COVERINGS AND PERIMETERS (OCT 2019)

A. Carpet or carpet tiles shall meet the requirements set forth in the specifications below. Floor perimeters at partitions shall have wood, rubber, vinyl, or carpet base. Floor covering shall be installed in accordance with manufacturing instructions to lay smoothly and evenly.

B. The use of existing carpet may be approved by the Government; however, existing carpet shall be repaired, stretched, and cleaned before occupancy and shall meet the static buildup requirement as stated in the specifications below.

C. Any alternate flooring shall be pre-approved by the Government.

D. SPECIFICATIONS FOR CARPET TO BE NEWLY INSTALLED OR REPLACED

1. Product sustainability and environmental requirements. For leases 10,000 RSF or greater, floor covering and perimeter products must meet applicable, statutory, environmentally preferable criteria related to biobased and recovered material content as outlined under the Green Procurement Compilation at WWW.SFTOOL.GOV/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/23/CARPET/0?ADDON=FALSE, HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/1307/FLOOR-COVERINGS-NON-CARPET/0?ADDON=FALSE, and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/3/BUILDING-FINISHES/97/FLOOR-TILES-HEAVY-DUTYCOMMERCIAL/0?ADDON=FALSE.

2. Face fiber content. Face yarn must be 100 percent nylon fiber. Loop Pile shall be 100 percent Bulk Continuous Filament (BCF); cut and loop shall be 100 percent BCF for the loop portion and may be BCF or staple for the cut portion; cut pile carpet shall be staple or BCF.

3. Performance requirements for broadloom and modular tile:

a. Static: Less than or equal to 3.5 kV when tested by AATCC Test Method 134 (Step Test Option).
b. Flammability: Meets CPSC-FF-1-70, DOC-FF-1-70 Methenamine Tablet Test criteria.
c. Flooring Radiant Panel Test: Meets NFPA 253 Class I or II depending upon occupancy and fire code when tested under ASTM E-648 for glue down installation.
d. Smoke Density: NBS Smoke Chamber - Less than 450 Flaming Mode when tested under ASTM E-662.

NOTE: Testing must be performed in a NVLAP accredited laboratory.

4. Texture Appearance Retention Rating (TARR). Carpet must meet TARR rating of at least 3.0 TARR for moderate traffic areas such as private offices, and heavy traffic areas such as training space, conference rooms, courtrooms, etc., and at least 3.5 TARR for severe traffic areas, including open office space, cafeteria, corridors and lobbies. The carpet must be evaluated using ASTM D-5252 Hexapod Drum Test as per the commercial carpet test procedure and the TARR classification determined using ASTM D-7330.

5. Carpet reclamation. Reclamation of existing carpet to be determined with potential vendor. When carpet is replaced, submit certification documentation from the reclamation facility to the LCO.

6. Warranty. Submit a copy of the manufacturer's standard warranty to the LCO within the first 60 days of Government occupancy. The Government is to be a beneficiary of the terms of this warranty.

5.13 HEATING AND AIR CONDITIONING (JUN 2012)

Zone Control. Provide individual thermostat control for office Space with control areas not to exceed 1,500 ABOA SF. Interior spaces must be separately zoned. Specialty occupancies (conference rooms, kitchens, etc.) must have active controls capable of sensing Space use and modulating HVAC system in response to Space demand. Areas that routinely have extended hours of operation shall be environmentally controlled through dedicated heating and air conditioning equipment. Special purpose areas (such as photocopy centers, large conference rooms, computer rooms, etc.) with an internal cooling load in excess of 5 tons shall be independently controlled. Provide concealed package air conditioning equipment to meet localized spot cooling of tenant special equipment. Portable space heaters are prohibited.

5.14 ELECTRICAL: DISTRIBUTION (SEP 2015)

A. All electrical, telephone, and data outlets within the Space shall be installed by the Lessor in accordance with the DIDs, if applicable. All electrical outlets shall be installed in accordance with NFPA Standard 70.

B. All outlets within the Space shall be marked and coded for ease of wire tracing; outlets shall be circuited separately from lighting. All floor outlets shall be flush with the plane of the finished floor. Outlet cover colors shall be coordinated with partition finish selections.

C. The Lessor shall in all cases safely conceal outlets and associated wiring (for electricity, voice, and data) to the workstation(s) in partitions, ceiling plenums, in recessed floor ducts, under raised flooring, or by use of a method acceptable to the Government.

5.15 TELECOMMUNICATIONS: DISTRIBUTION AND EQUIPMENT (JUN 2012)

Telecommunications floor or wall outlets shall be provided as part of the TIs. At a minimum, each outlet shall house one 4-pair wire jack for voice and one 4-pair wire jack for data. The Lessor shall ensure that all outlets and associated wiring, copper, coaxial cable, optical fiber, or other transmission medium used to transmit telecommunications (voice, data, video, Internet, or other emerging technologies) service to the workstation shall be safely concealed under raised floors, in floor ducts, walls, columns, or molding. All outlets/junction boxes shall be provided with rings and pull strings to facilitate the installation of cable. Some transmission medium may require special conduit, inner duct, or shielding as specified by the Government's Cable Plant Standards.

5.16 TELECOMMUNICATIONS: LOCAL EXCHANGE ACCESS (AUG 2008)

Provide sealed conduit to house the agency telecommunications system when required.

5.17 DATA DISTRIBUTION (OCT 2020)

The Lessor shall purchase and install data cable as part of the tenant improvements. The Lessor shall safely conceal data outlets and the associated wiring used to transmit data to workstations in floor ducts, walls, columns, or below access flooring. When cable consists of multiple runs, the Lessor shall provide ladder type or other acceptable cable trays to prevent cable coming into contact with suspended ceilings or sprinkler piping. Cable trays shall form a loop around the perimeter of the Space such that they are within a 30-foot horizontal distance of any single drop. If the Government chooses to purchase and install data cabling, then the Lessor shall provide, as part of the tenant improvements, outlets with rings and pull strings to facilitate the installation of the data cable.

5.18 ELECTRICAL, TELEPHONE, DATA FOR SYSTEMS FURNITURE (OCT 2020)

A. The Lessor shall provide as part of the TIs separate data, telephone, and electric junction boxes for the base feed connections to Government provided modular or systems furniture, when such feeds are supplied via wall outlets or floor penetrations. When overhead feeds are used, junction boxes shall be installed for electrical connections. Raceways shall be provided throughout the furniture panels to distribute the electrical, telephone, and data cable. The Lessor shall provide all electrical service wiring and connections to the furniture at designated junction points. Each electrical junction shall contain an 8-wire feed consisting of 3 general purpose 120-V circuits with 1 neutral and 1 ground wire, and a 120-V isolated ground circuit with 1 neutral and 1 isolated ground wire. A 20-ampere circuit shall have no more than 8 general purpose receptacles or 4 isolated ground "computer" receptacles.

B. The Lessor shall purchase and install data and telecommunications cable. Said cable shall be installed and connected to systems furniture by the Lessor/contractor with the assistance and/or advice of the Government or computer vendor. The Lessor shall provide wall mounted data and telephone junction boxes. When cable consists of multiple runs, the Lessor shall provide ladder-type or other acceptable cable trays to prevent Government provided cable coming into contact with suspended ceilings or sprinkler piping. Cable trays shall form a loop around the perimeter of the Space such that they are within a 30-foot horizontal distance of any single drop. Said cable trays shall provide access to both telecommunications data

closets and telephone closets. If the Government chooses to purchase and install data and telecommunications cabling, then the Lessor shall provide, as part of the TIs, outlets with rings and pull strings to facilitate the installation of the data cable.

C. The Lessor shall furnish and install suitably sized junction boxes near the "feeding points" of the furniture panels. All "feeding points" shall be shown on Government approved design intent drawings. The Lessor shall temporarily cap off the wiring in the junction boxes until the furniture is installed. The Lessor shall make all connections in the power panel and shall keep the circuit breakers off. The Lessor shall identify each circuit with the breaker number and shall identify the computer hardware to be connected to it. The Lessor shall identify each breaker at the panel and identify the devices that it serves.

D. The Lessor's electrical contractor must connect power poles or base feeds in the junction boxes to the furniture electrical system and test all pre-wired receptacles in the systems furniture. Other Government contractors will be installing the data cable in the furniture panels for the terminal and printer locations, installing the connectors on the terminal/printer ends of the cable, and continuity testing each cable. Work shall be coordinated and performed in conjunction with the furniture, telephone, and data cable installers. Much of this work may occur over a weekend on a schedule that requires flexibility and on-call visits. The Lessor must coordinate the application of Certification of Occupancy with furniture installation.

5.19 LIGHTING: INTERIOR AND PARKING – TI (SEP 2015)

A. FIXTURES: Once the design intent drawings are approved, the Lessor shall design and provide interior lighting to comply with requirements under the paragraph, "Lighting: Interior and Parking – Shell." Any additional lighting fixtures and/or components required beyond what would have been provided for an open office plan (shell) are part of the TIs.

B. PENDANT STYLE FIXTURES: If pendant style lighting fixtures are used, the increase between the number of fixtures required in the Building shell and the Space layout is part of the TIs.

C. MIXED FIXTURES: DIDs, if applicable, may require a mixed use of recessed or pendant style fixtures in the Space.

D. BUILDING PERIMETER: There may be additional requirements for lighting in exterior parking areas, vehicle driveways, pedestrian walkways, and Building perimeter in the Security Requirements attached to this Lease.

5.20 AUTOMATIC FIRE SPRINKLER SYSTEM - TI (OCT 2016)

Where sprinklers are required in the Space, sprinkler mains and distribution piping in a "protection" layout (open plan) with heads turned down with an escutcheon or trim plate shall be provided as part of Shell rent. Any additional sprinkler fixtures and/or components required in the Space beyond what would have been provided for an open office plan (shell) are part of the TIs.

SECTION 6 UTILITIES, SERVICES, AND OBLIGATIONS DURING THE LEASE TERM

6.01 PROVISION OF SERVICES, ACCESS, AND NORMAL HOURS (JUN 2012)

A. The Government's normal hours of operations are established as **7:00** AM to **6:00** PM, Monday through Saturday, with the exception of Federal holidays. Services, maintenance, and utilities shall be provided during these hours. The Government shall have access to the Premises and its Appurtenant Areas at all times without additional payment, including the use, during other than normal hours, of necessary services and utilities such as elevators, restrooms, lights, and electric power. Cleaning shall be performed during normal hours.

B. The Lessor and the Lessor's representatives, employees and contractors shall demonstrate a cooperative, positive, welcoming, respectful, professional and business-like demeanor and shall present a neat, clean, job-appropriate (professional) appearance.

6.02 UTILITIES (APR 2011)

The Lessor is responsible for providing all utilities necessary for base Building and tenant operations as part of the rental consideration.

6.03 ~~UTILITIES SEPARATE FROM RENTAL/BUILDING OPERATING PLAN (OCT 2020)~~ INTENTIONALLY DELETED

6.04 UTILITY CONSUMPTION REPORTING (OCT 2016)

Upon the effective date of the Lease, only for leases over 10,000 RSF, the Lessor shall provide regular quarterly reports for the amount of utilities (including water) consumed at the Building broken down by utility type per month for the duration of the Lease. Lessors shall report this utility consumption data within 45 calendar days of the end of each calendar quarter in the Environmental Protection Agency (EPA) Portfolio Manager online tool HTTPS://WWW.ENERGYSTAR.GOV/. Data reported includes, but is not limited to, the number of actual units consumed, by utility type per month, and associated start and end date(s) for that consumption.

(Refer to the following link for reporting guidance: www.gsa.gov/ucr)

6.05 HEATING AND AIR CONDITIONING (OCT 2020)

A. In all office areas, temperatures shall conform to local commercial equivalent temperature levels and operating practices in order to maximize tenant satisfaction. These temperatures shall be maintained throughout the leased Premises and service areas, regardless of outside temperatures, during the hours of operation specified in the Lease. The Lessor shall perform any necessary systems start-up required to meet the commercially equivalent temperature levels prior to the first hour of each day's operation. At all times, humidity shall be maintained below 60% relative humidity.

B. During non working hours, heating temperatures shall be set no higher than 55° Fahrenheit, and air conditioning shall not be provided except as necessary to return Space temperatures to a suitable level for the beginning of working hours. Thermostats shall be secured from manual operation by key or locked cage. A key shall be provided to the Government's designated representative.

C. Thermal comfort. During all working hours, Lessor shall comply with ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy that corresponds with how the Building's HVAC system was designed to perform. At a minimum, Lessor must meet ASHRAE Standard 55-2004.

D. Warehouse or garage areas require heating and ventilation only. Cooling of this Space is not required. Temperature of warehouse or garage areas shall be maintained at a minimum of 50° Fahrenheit.

E. The Lessor shall conduct HVAC system balancing after any HVAC system alterations during the term of the Lease and shall make a reasonable attempt to schedule major construction outside of office hours.

F. Normal HVAC systems' maintenance shall not disrupt tenant operations.

G. **325** ABOA SF of the Premises shall receive cooling at all times (24 hrs a day, 365 days a year) for purposes of cooling the designated server room. The BTU output of this room is established as **58,000** BTU per hour. The temperature of this room shall be maintained at **65-70** degrees F, with humidity control not to exceed 60% relative humidity, regardless of outside temperature or seasonal changes.

H. INTENTIONALLY DELETED

I. The 24 hour, 365 days a year HVAC service(s) stated above shall be provided by the Lessor as part of the operating rent established under the Lease.

6.06 OVERTIME HVAC USAGE (OCT 2020)

A. If there is to be a charge for heating or cooling outside of the Building's normal hours, such services shall be provided at the hourly rates set forth elsewhere in the Lease. Overtime usage services may be ordered by the Government's authorized representative only.

B. When the cost of service is $10,000 or less, the service may be ordered orally. An invoice shall be submitted to the official placing the order for certification and payment. Orders for services costing more than $10,000 shall be placed using GSA Form 300, Order for Supplies or Services, or

other approved service requisition procurement document. An invoice conforming to the requirements of this Lease shall be submitted to the official placing the order for certification and payment.

C. Failure to submit a proper invoice within 120 days of providing overtime utilities shall constitute a waiver of the Lessor's right to receive any payment for such overtime utilities pursuant to this Lease.

6.07 JANITORIAL SERVICES (JUL 2020)

The Lessor shall maintain the Premises and all areas of the Property to which the Government has routine access in a clean condition and shall provide supplies and equipment for the term of the Lease. The following schedule describes the level of services intended. Performance will be based on the LCO's evaluation of results, not the frequency or method of performance.

A. Daily. Empty trash receptacles. Sweep entrances, lobbies, and corridors. Spot sweep floors, and spot vacuum carpets. Clean drinking fountains. Sweep and damp mop or scrub restrooms. Clean all restroom fixtures and replenish restroom supplies. Dispose of all trash and garbage generated in or about the Building. Wash inside and out or steam clean cans used for collection of food remnants from snack bars and vending machines. Dust horizontal surfaces that are readily available and visibly require dusting. Spray buff resilient floors in main corridors, entrances, and lobbies. Clean elevators and escalators. Remove carpet stains. Police sidewalks, parking areas, and driveways. Sweep loading dock areas and platforms. Clean glass entry doors to the Space.

B. Three times a week. Sweep or vacuum stairs.

C. Weekly. Damp mop and spray buff all resilient floors in restrooms and health units. Sweep sidewalks, parking areas, and driveways (weather permitting).

D. Every two weeks. Spray buff resilient floors in secondary corridors, entrance, and lobbies. Damp mop and spray buff hard and resilient floors in office Space.

E. Monthly. Thoroughly dust furniture. Completely sweep and/or vacuum carpets. Sweep storage Space. Spot clean all wall surfaces within 70 inches of the floor.

F. Every two months. Damp wipe restroom wastepaper receptacles, stall partitions, doors, window sills, and frames. Shampoo entrance and elevator carpets.

G. Three times a year. Dust wall surfaces within 70 inches of the floor, vertical surfaces and under surfaces. Clean metal and marble surfaces in lobbies. Wet mop or scrub garages.

H. Twice a year. Wash all interior and exterior windows and other glass surfaces. Strip and apply four coats of finish to resilient floors in restrooms. Strip and refinish main corridors and other heavy traffic areas.

I. Annually. Wash all venetian blinds, and dust 6 months from washing. Vacuum or dust all surfaces in the Building more than 70 inches from the floor, including light fixtures. Vacuum all draperies in place. Strip and refinish floors in offices and secondary lobbies and corridors. Shampoo carpets in corridors and lobbies. Clean balconies, ledges, courts, areaways, and flat roofs.

J. Every two years. Shampoo carpets in all offices and other non-public areas.

K. Every five years. Dry clean or wash (as appropriate) all draperies.

L. As required. Properly maintain plants and lawns. Provide initial supply, installation, and replacement of light bulbs, tubes, ballasts, and starters. Provide and empty exterior ash cans and clean area of any discarded cigarette butts.

M. Pest control. Control pests as appropriate, using Integrated Pest Management techniques, as specified in the GSA Environmental Management Integrated Pest Management Technique Guide (E402-1001).

N. INTENTIONALLY DELETED

6.08 SELECTION OF CLEANING PRODUCTS (OCT 2019)

For leases 10,000 RSF or greater where the Government is a sole occupant of the Building, the Lessor shall use cleaning products (including general purpose cleaners, floor cleaners, hand soap, etc.) that meet applicable, statutory, environmentally preferable criteria related to biobased and recovered material content as outlined under the Green Procurement Compilation at HTTPS://SFTOOL.GREENPORCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/5/CLEANING-PRODUCTS/0.

6.09 SELECTION OF PAPER PRODUCTS (OCT 2019)

For leases 10,000 RSF or greater where the Government is a sole occupant of the Building, the Lessor shall select paper and paper products (e.g., restroom tissue and paper towels)that meet applicable, statutory, environmentally preferable criteria related to recovered material content as outlined under the Green Procurement Compilation at HTTPS://SFTOOL.GREENPORCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/5/CLEANING-PRODUCTS/0.

6.10 SNOW REMOVAL (OCT 2020)

Lessor shall provide snow removal services for the Government on all days for which this Lease has designated normal hours. Lessor shall clear parking lots if the accumulation of snow exceeds two inches. Lessor shall clear sidewalks, walkways and other entrances before accumulation exceeds 1.5 inches. The snow removal shall take place no later than 5:00 AM, without exception. Should accumulation continue throughout the day, the Lessor shall provide such additional snow removal services to prevent accumulation greater than the maximums specified in this paragraph. In addition to snow removal, the Lessor shall keep walkways, sidewalks and parking lots free of ice during the normal hours. The Lessor shall remove excess buildup of sand and/or ice melt to minimize slipping hazards. If the Building entrance(s) has a northern exposure, then Lessor shall take additional measures (e.g., more frequent snow removal or application of ice-melting agents, warning signs, etc.) to protect the safety of pedestrians.

6.11 MAINTENANCE AND TESTING OF SYSTEMS (SEP 2013)

A. The Lessor is responsible for the total maintenance and repair of the leased Premises. Such maintenance and repairs include the site and private access roads. All equipment and systems shall be maintained to provide reliable, energy efficient service without unusual interruption, disturbing noises, exposure to fire or safety hazards, uncomfortable drafts, excessive air velocities, or unusual emissions of dirt. The Lessor's maintenance responsibility includes initial supply and replacement of all supplies, materials, and equipment necessary for such maintenance. Maintenance, testing, and inspection of appropriate equipment and systems shall be done in accordance with current applicable codes, and inspection certificates shall be displayed as appropriate. Copies of all records in this regard shall be forwarded to the Government's designated representative.

B. At the Lessor's expense, the Government reserves the right to require documentation of proper operations, inspection, testing, and maintenance of fire protection systems, such as, but not limited to, fire alarm, fire sprinkler, standpipes, fire pump, emergency lighting, illuminated exit signs, emergency generator, prior to occupancy to ensure proper operation. These tests shall be witnessed by the Government's designated representative.

6.12 MAINTENANCE OF PROVIDED FINISHES (OCT 2016)

A. Paint, wall coverings. Lessor shall maintain all wall coverings and high performance paint coatings in "like new" condition for the life of the Lease. All painted surfaces shall be repainted at the Lessor's expense, including the moving and returning of furnishings, any time during the occupancy by the Government if the paint is peeling or permanently stained, except where damaged due to the negligence of the Government. All work shall be done after normal working hours as defined elsewhere in this Lease. In addition to the foregoing requirement,

1. Lessor shall repaint common areas at least every three years.

2. Lessor shall perform cyclical repainting of the Space every **5** years of occupancy. This cost, including the moving and returning of furnishings, as well as disassembly and reassembly of systems furniture per manufacturer's warranty, shall be at the Lessor's expense.

B. Carpet and flooring.

1. Except when damaged by the Government, the Lessor shall repair or replace flooring at any time during the Lease term when:

a. Backing or underlayment is exposed;
b. There are noticeable variations in surface color or texture;
c. It has curls, upturned edges, or other noticeable variations in texture;
d. Tiles are loose; or,
e. Tears or tripping hazards are present.

2. Notwithstanding the foregoing, as part of the rental consideration, the Lessor shall replace all carpet and base coving in the Space every **7** years, with a product which meets the requirements in the "Floor Coverings and Perimeters" paragraph in this Lease.

3. Repair or replacement shall include the moving and returning of furnishings, including disassembly and reassembly of systems furniture per manufacturer's warranty, if necessary. Work shall be performed after the normal hours established elsewhere in this Lease.

6.13 ASBESTOS ABATEMENT (APR 2011)

If asbestos abatement work is to be performed in the Space after occupancy, the Lessor shall submit to the Government the occupant safety plan and a description of the methods of abatement and re-occupancy clearance, in accordance with OSHA, EPA, DOT, state, and local regulations and guidance, at least 4 weeks prior to the abatement work.

6.14 ONSITE LESSOR MANAGEMENT (APR 2011)

The Lessor shall provide an onsite Building superintendent or a locally designated representative available to promptly respond to deficiencies, and immediately address all emergency situations.

6.15 IDENTITY VERIFICATION OF PERSONNEL (OCT 2020)

A. The Government requires to verify identities of personnel with routine and/or unaccompanied access to the Government's Space, including both pre and post occupancy periods. The Lessor shall comply with the agency personal identity verification procedures below that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and M-19-17, and Federal Information Processing Standards Publication (FIPS PUB) Number 201, as amended. These policies require the Government to conduct background investigations and make HSPD-12 compliant suitability determinations for all persons with routine or unaccompanied access to Government leased Space. By definition, this includes at a minimum each employee of the Lessor, as well as employees of the Lessor's contractors or subcontractors who will provide

building operating services requiring routine access to the Government's leased Space for a period greater than 6 months. The Government may also require this information for the Lessor's employees, contractors, or subcontractors who will be engaged to perform alterations or emergency repairs in the Government's Space.

B. Application Process: The background investigation will be done using the Government's prescribed process. The Lessor must provide information on each of their contractor/personnel meeting the above criteria to the Government, whereupon each identified contractor/personnel will be notified with instructions for completing the identity verification application within a given time frame. The application process will include completing supplemental information forms that must be inputted into the identity verification system in order for the application to be considered complete. Additionally, the Lessor must ensure prompt completion of the fingerprint process for their contractor/personnel. Email notifications will be sent with instructions on the steps to be taken to schedule an appointment for fingerprinting at an approved regional location along with instructions on how to complete the background investigation application.

C. The Lessor must ensure the Lease Contracting Officer (or the Lease Contracting Officer's designated representative) has all of the requested documentation timely to ensure the completion of the investigation.

D. Based on the information furnished, the Government will conduct background investigations. The Lease Contracting Officer will advise the Lessor in writing if a person fails the investigation, and, effective immediately, that person will no longer be allowed to work or be assigned to work in the Government's Space.

E. Throughout the life of the Lease, the Lessor shall provide the same data for any new employees, contractors, or subcontractors who will be assigned to the Government's Space in accordance with the above criteria. In the event the Lessor's contractor or subcontractor is subsequently replaced, the new contractor or subcontractor is not required to have persons re-apply who were cleared through this process while associated with the former contractor or subcontractor in accordance with GSA policy. The Lessor shall require each cleared person to re-apply and obtain a new clearance in accordance with GSA policy.

F. The Lessor is accountable for not allowing contractors to start work without the successful completion of the appropriate background investigation as required by GSA policy.

G. Access Card Retrieval/Return: Upon an Entry on Duty notification, the Government will issue a Personal Identity Verification (PIV) credential that is sometimes referred to as a GSA Access card. Lessors are responsible for all PIV credential issued to their contractors/personnel pursuant to this Lease. Lessors are specifically responsible for ensuring that all GSA PIV access cards are returned to the Lease Contracting Officer or their designee whenever their employees or a contractor no longer require access to the Space (such as When no longer needed for contract performance, upon completion of the Contractor employee's employment, and upon contract completion or termination). Additionally, the Lessor must notify the Lease Contracting Officer or their designee whenever a GSA PIV Access card is lost or stolen in which event the Lessor may be responsible for reimbursing the Government for replacement credentials at the current cost per PIV HSPD12 credential. Unreturned PIV Access cards will be considered as lost or stolen cards.

H. The Government reserves the right to conduct additional background checks on Lessor personnel and contractors with routine access to Government leased Space throughout the term of the Lease to determine who may have access to the Premises.

I. The Lease Contracting Officer may delay final payment under a contract if the Contractor fails to comply with these requirements.

J. The Lessor shall insert this paragraph in all subcontracts when the subcontractor is required to have physical access to a federally controlled facility or access to a federal information system.

6.16 SCHEDULE OF PERIODIC SERVICES (OCT 2020)

Upon acceptance of the Space, the Lessor shall provide the LCO with a detailed written schedule of all periodic services and maintenance to be performed other than daily, weekly, or monthly.

6.17 LANDSCAPING (OCT 2019)

A. For leases 10,000 RSF or greater where the Government is the sole occupant of the building, the Lessor shall use landscaping products that meet applicable, statutory, environmentally preferable criteria related to recycled content as outlined under the Green Procurement Compilation at HTTPS://SFTOOL/GREENPROCUREMENT and HTTPS://SFTOOL.GOV/GREENPROCUREMENT/GREEN-PRODUCTS/6/LANDSCAPING-PRODUCTS/0.

B. Landscape management practices shall prevent pollution by:

1. Employing practices which avoid or minimize the need for herbicides, fertilizers and pesticides; and

2. Composting/recycling all yard waste.

C. INTENTIONALLY DELETED

6.18 LANDSCAPE MAINTENANCE (APR 2011)

Landscape maintenance shall be performed during the growing season at not less than a weekly cycle and shall consist of watering, weeding, mowing, and policing the area to keep it free of debris. Pruning and fertilization shall be done on an as-needed basis. In addition, dead, dying, or damaged plants shall be replaced.

6.19 RECYCLING (JUN 2012)

A. For Leases greater than 10,000 rentable SF, with a Lease term greater than six months, the Lessor shall establish a recycling program for (at a minimum) paper, corrugated cardboard, glass, plastics, and metals where local markets for recovered materials exist.

B. Where state or local law, code, or ordinance requires recycling programs for the Premises, Lessor shall comply with such state and/or local law, code, or ordinance.

C. When implementing any recycling program, the Lessor shall provide an easily accessible, appropriately sized area (2 SF per 1,000 SF of Building gross floor area) that serves the Space for the collection and storage of materials for recycling. Telecom rooms are not acceptable as recycling space. During the Lease term, the Lessor agrees, upon request, to provide the Government with additional information concerning recycling programs maintained in the Building and in the Space.

6.20 RANDOLPH-SHEPPARD COMPLIANCE (SEP 2013)

During the term of the Lease, the Lessor may not establish vending facilities within the leased Space that will compete with any Randolph-Sheppard vending facilities.

6.21 ~~SAFEGUARDING AND DISSEMINATION OF CONTROLLED UNCLASSIFIED INFORMATION (CUI) BUILDING INFORMATION (FEB 2020)~~ INTENTIONALLY DELETED

6.22 INDOOR AIR QUALITY (OCT 2019)

A. The Lessor shall control airborne contaminants at the source and/or operate the Space in such a manner that indoor air quality action limits identified in the PBS Desk Guide for Indoor Air Quality Management (Companion to GSA Order PBS 1000.8), OSHA regulatory limits, and generally accepted consensus standards are not exceeded. .

B. The Lessor shall avoid the use of products containing toxic, hazardous, carcinogenic, flammable, or corrosive ingredients as determined from the product label or manufacturer's safety data sheet. The Lessor shall use available odor-free or low odor products when applying paints, glues, lubricants, and similar wet products. When such equivalent products are not available, lessor shall use the alternate products outside normal working hours. Except in an emergency, the Lessor shall provide at least 72 hours advance notice to the Government before applying chemicals or products with noticeable odors in occupied Spaces and shall adequately ventilate those Spaces during and after application.

C. The Lessor shall serve as first responder to any occupant complaints about indoor air quality (IAQ). The Lessor shall promptly investigate such complaints and implement the necessary controls to address each complaint. Investigations shall include testing as needed, to ascertain the source and severity of the complaint.

D. The Government reserves the right to conduct independent IAQ assessments and detailed studies in Space that it occupies, as well as in space serving the Space (e.g., common use areas, mechanical rooms, HVAC systems, etc.). The Lessor shall assist the Government in its assessments and detailed studies by:

1. Making available information on Building operations and Lessor activities;
2. Providing access to Space for assessment and testing, if required; and
3. Implementing corrective measures required by the LCO. The Lessor shall take corrective action to correct any tests or measurements that do not meet GSA policy action limits in the PBS Desk Guide for Indoor Air Quality Management (Companion to GSA Order PBS 1000.8), OSHA regulatory limits, and generally accepted consensus standards.

E. The Lessor shall provide to the Government safety data sheets (SDS) upon request for the following products prior to their use during the term of the Lease: adhesives, caulking, sealants, insulating materials, fireproofing or firestopping materials, paints, carpets, floor and wall patching or leveling materials, lubricants, clear finish for wood surfaces, janitorial cleaning products, pesticides, rodenticides, and herbicides. The Government reserves the right to review such products used by the Lessor within the Space, common building areas, ventilation systems and zones serving the Space, and the area above suspended ceilings and engineering space in the same ventilation zone as the Space.

F. The Lessor shall use high efficiency (HEPA) filtration vacuums for cleaning and minimum MERV 10 rated ventilation system filtration whenever feasible.

G. The Lessor is encouraged to comply with best practices outlined in Appendix D- Indoor Air Quality in GSA Leased Facilities (Best Practices) within the PBS Desk Guide for Indoor Air Quality Management (Companion to GSA Order PBS 1000.8).

6.23 RADON IN AIR (OCT 2016)

If Space planned for occupancy by the Government is on the second floor above grade or lower, the Lessor shall, prior to occupancy, test the leased Space for 2 days to 3 days using charcoal canisters. The Lessor is responsible to provide Space in which radon levels in air are below the GSA action levels of 4 picoCuries per liter (pCi/L) for childcare and 25 pCi/L for all other space. After the initial testing, a follow-up test for a minimum of 90 days using alpha track detectors shall be completed. For further information on radon, go to: HTTPS://WWW.EPA.GOV/RADON .

6.24 ~~RADON IN WATER (JUN 2012)~~ INTENTIONALLY DELETED

6.25 HAZARDOUS MATERIALS (SEP 2013)

A. The leased Space shall be free of hazardous materials, hazardous substances, and hazardous wastes, as defined by and according to applicable Federal, state, and local environmental regulations. Should there be reason to suspect otherwise, the Government reserves the right, at Lessor's expense, to require documentation or testing to confirm that the Space is free of all hazardous materials.

B. Lessor shall, to the extent of its knowledge, notify Government of the introduction of any hazardous materials onto the Property by Lessor or others, including but not limited to, co-tenants occupying Space in the Building.

6.26 MOLD (OCT 2020)

A. Actionable mold is either visible mold or airborne mold of types and concentrations in excess of that found in the local outdoor air or non-problematic control areas elsewhere in the same building, whichever is lower. The Lessor shall safely remediate all actionable mold in accordance with sub-paragraph C below.

B. The Lessor shall provide Space to the Government that is free from ongoing water leaks or moisture infiltration. The Space and ventilation zones serving the Space shall also be free of actionable mold.

C. Within 72 hours following a flood, plumbing leak or heavy rain whereby the Government Space or air zones serving the Space may have become moisture damaged, the Lessor shall repair any leakage sources and remediate the moisture damage. Whenever moisture damage or infiltration persists such that: mold is visible, mold odors are present, or occupants register complaints about mold, the Lessor shall employ an industrial hygienist or environmental consultant experienced in mold assessment to inspect and evaluate the Space and air zones serving the Space for visible and/or actionable mold presence; inspection shall take place no later than 15 calendar days following identification of a potential mold issue as described above. The Lessor shall promptly furnish these inspection results to the Government. After all leaks have been identified and corrected, the Lessor shall safely remediate all visible moldy and/or water damaged materials identified by the consultant using a qualified remediation contractor following the methods identified in "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001, September 2008) and all applicable state laws pertaining to mold remediation practices. Remediation shall also remove actionable mold levels. Remediation shall be completed within a time frame acceptable to the Lease Contracting Officer which shall be no later than 90 calendar days following confirmation of the presence of actionable mold.

D. The presence of actionable mold in the Premises may be treated as a Casualty, as determined by the Government, in accordance with the Fire and Other Casualty clause contained in the General Clauses of this Lease. In addition to the provisions of the Fire and Other Casualty clause of this Lease, should a portion of the Premises be determined by the Government to be un-tenantable due to an act of negligence by the Lessor or his agents, the Lessor shall provide reasonably acceptable alternative Space at the Lessor's expense, including the cost of moving, and any required alterations.

6.27 OCCUPANT EMERGENCY PLANS (OCT 2020)

The Lessor is required to cooperate, participate and comply with the development and implementation of the Government's Occupant Emergency Plan (OEP) and a supplemental Shelter-in Place (SIP) Plan. Periodically, the Government may request that the Lessor assist in reviewing and revising its OEP and SIP. The Plan, among other things, will include evacuation procedures and an annual emergency evacuation drill, emergency shutdown of air intake procedures, and emergency notification procedures for the Lessor's Building engineer or manager, Building security, local emergency personnel, and Government agency personnel.

6.28 FLAG DISPLAY (OCT 2016)

If the Lessor has supplied a flagpole on the Property as a requirement of this Lease, the Lessor shall be responsible for flag display on all workdays and Federal holidays. The Lessor may illuminate the flag in lieu of raising and lowering the flag daily. The Lessor shall register with the Federal Protective Service (FPS) MegaCenter in order to receive notifications regarding when flags shall be flown at half-staff, as determined by Executive Order.

SECTION 7 ADDITIONAL TERMS AND CONDITIONS

7.01 SECURITY REQUIREMENTS (OCT 2016)

The Lessor agrees to the requirements of Federal Security Level **II** attached to this Lease.

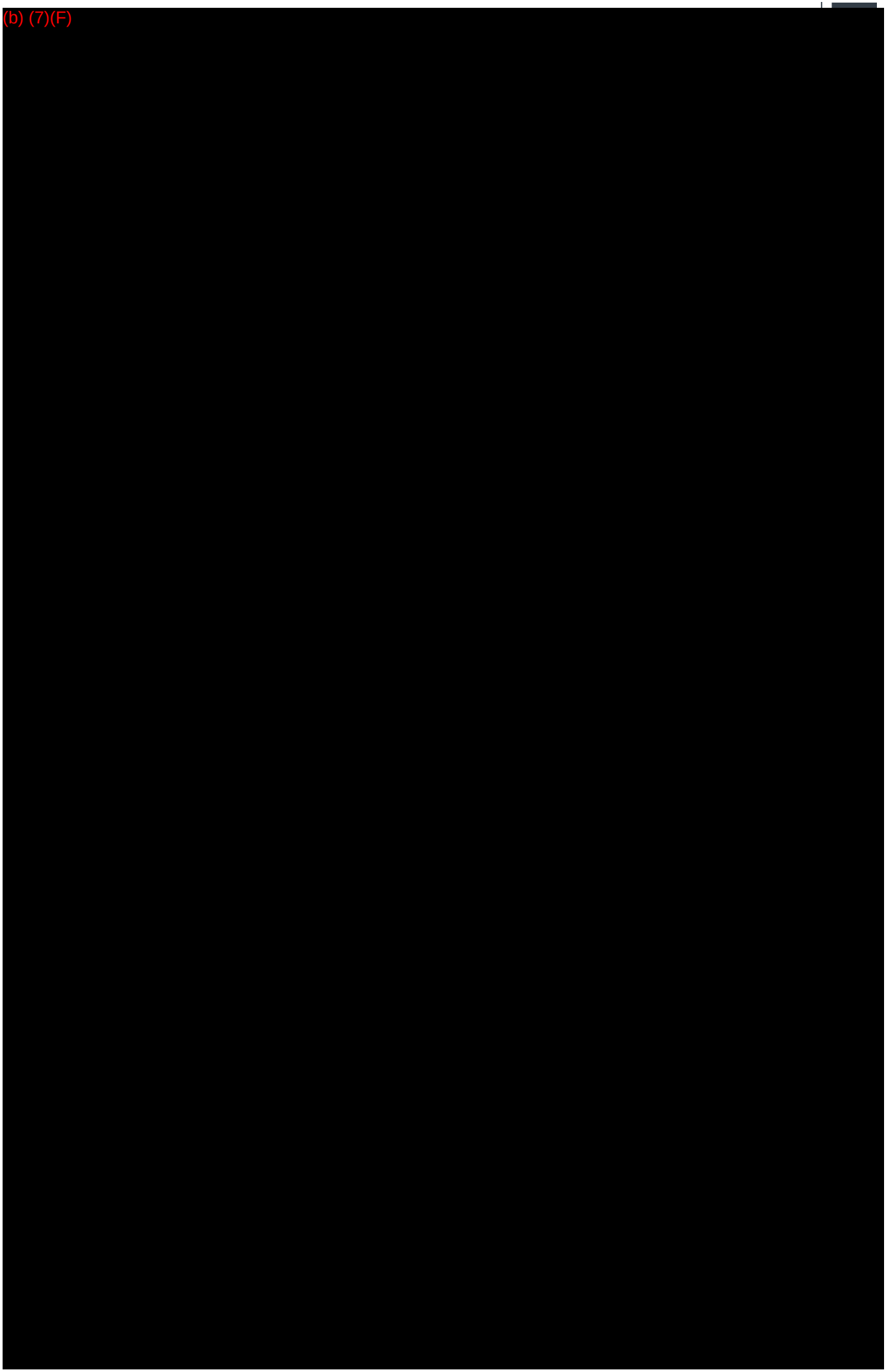
7.02 MODIFIED LEASE PARAGRAPHS (OCT 2016)

The following paragraphs have been modified in this Lease:

5.15 TELECOMMUNICATIONS: DISTRIBUTION AND EQUIPMENT (JUN 2012)

7.03 ~~ADDENDUM TO GSA FORM 3517B, GENERAL CLAUSES, NO FEDERALLY ELECTED OFFICIALS TO BENEFIT (OCT 2018)~~ INTENTIONALLY DELETED

Lease No. GS-05P-LWI00685
Exhibit A – Floor Plan


(b) (7)(F)

Lease No. GS-05P-LWI00685
Exhibit B – Parking Plan

PARKING & TRANSPORTATION NARRATIVE

310W – 310 W. Wisconsin Avenue, Milwaukee

- 310W offers an on-site parking structure offering 595 parking stalls. The structure is connected to the building and is owned by the same ownership group as the office building. Current parking rates are $110/month for tenants and $140/month for non-tenants

- As part of the requirement, ownership has included 5 parking spaces into the rent for Tenant's use

- Visitor parking is also available in the attached structure. Visitors may have their parking validated or may pay per hour (rates vary)

- 310W is also connected to Milwaukee's 1.75 mile Skywalk System:

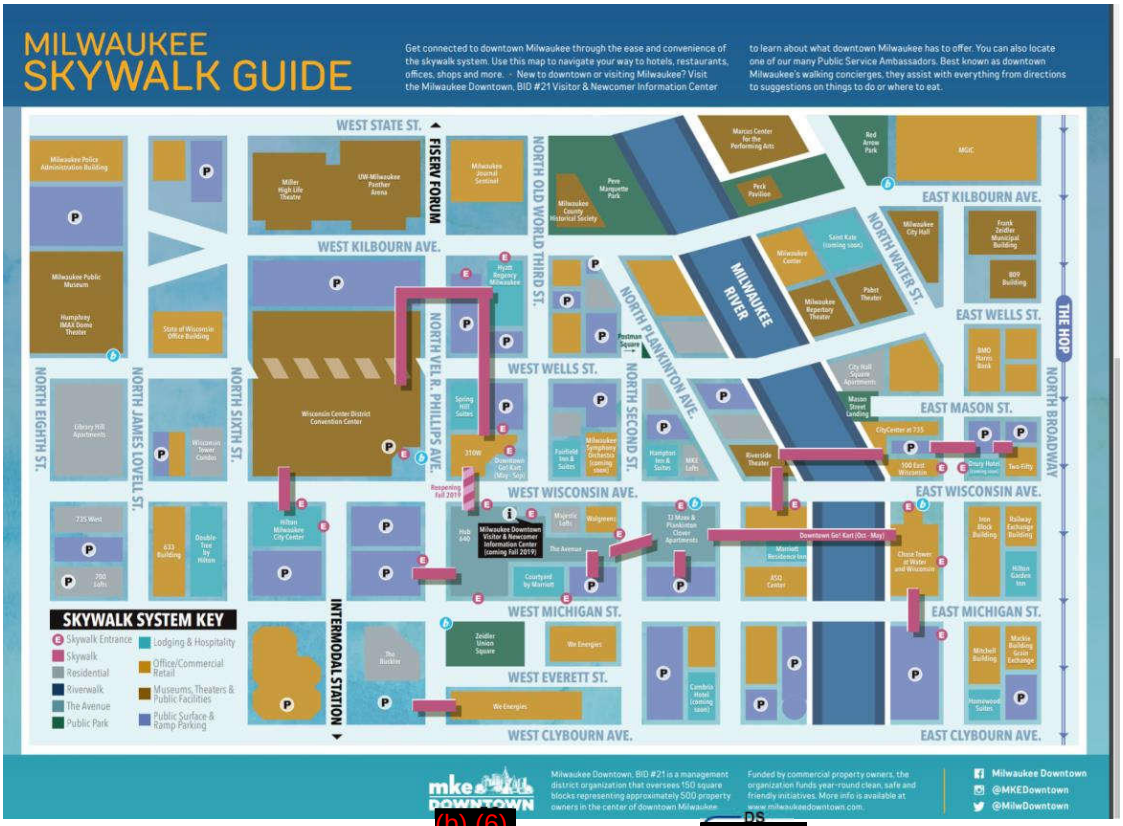
    - https://www.milwaukeedowntown.com/getting-around/skywalk-system

    - https://www.milwaukeedowntown.com/sites/default/files/content_blocks/files/BROCHURE_mkeSkywalk2019Apr2.pdf

- The Skywalk also offers a connection to over 10,300 parking spots

    - https://www.milwaukeedowntown.com/getting-around/parking

- In addition to on-site parking and dozens of parking lots/structures in the immediate area, 310W also offers public transportation (Milwaukee County Transit Routes), Bublr Bikes, and several scooter rental options



LESSOR (b) (6) GOVERNMENT: _ (b) (6)

Lease No. GS-05P-LWI00685
Exhibit C – Agency Requirements

LESSOR: (b) (6) GOVERNMENT: (b) (6)

U.S. Citizenship and Immigration Services

Milwaukee Field Office Special Requirements

USCIS Facilities Management Division
Version 3 – January 2020
Issuance Date: July 27th, 2021

LESSOR: (b) (6) GOVERNMENT: (b) (6)

Table of Contents

Overview

Building Design

The U.S. Citizenship and Immigration Services (USCIS) maintain a strong tradition of public building design that reflects the highly respected stature of the U.S. Government. All USCIS facilities should embrace and illustrate this principle and present a building or office environment that exhibits fiscal prudence and efficiency of the public's money, as well as, contribute to the vitality of the surrounding area.

USCIS space shall be located in an office, research, technology, or business park that is modern in design with a campus-like atmosphere; and be in a modern office building that is professional and prestigious in appearance with the surrounding development well maintained and in consonance with a professional image. The space shall be within an appropriately zoned district, i.e. Central Business District, Business Park, Commercial, or Office. Buildings located within any type of Manufacturing, Industrial, Warehouse, Retail or similar zones will not be accepted. Space shall be BOMA Class "A" or Class "B" Office space with no exceptions (See General Notes for definitions). USCIS space shall be located within a ½ walkable mile to public transportation with one or more bus stops or combination of bus and train stops. Adequate eating facilities shall be located within the immediate vicinity. Other services such as retail shops, cleaners, banks, etc. shall also be located within the immediate vicinity.

USCIS prefers single floor occupancy. If it is determined that USCIS space can be located on more than one story, the public entry, security, information, records, and ceremony rooms should remain on the same floor serving most public functions. The remaining USCIS required space will be planned accordingly to include proper and separate access (including elevators) for the public and for employees.

The separation of the Public and Employee space will be an important aspect of this facility. All visitors shall enter through a single, well-defined, secure entrance. The entrance sequence will include a public entry that provides for protection from the weather while waiting for the security screening. USCIS employs an online appointment scheduling system, so visitors will come in a consistent stream throughout the day. The busiest time will be first thing in the morning when the first round of customers arrive at the same time requiring the process to accommodate approximately 250-300 people. The employees will enter through a separate entrance.

Branding

Branding is incorporated throughout USCIS spaces and includes Lady Liberty, interior signage, and exterior signage. Branding is further emphasized through the use of color palettes.

Lady Liberty

This image should be provided on the exterior perimeter of the building near the public entry or within the public lobby space. Sizing, color, and material application will be determined during the design.

Exterior Signage

Signage must be provided on the exterior of the building or in the entrance area to the USCIS space. Additionally, USCIS may include a freestanding monument sign. The proposed sign location should be located on the site plan or building elevation plans. Based on the Offeror's location, additional exterior directional signage may be required for campus or professional park environments. (Dimension's utilized in the following layout are for scaling purposes only.

LETTERING AS MANUFACTURED BY:
Gemini Incorporated
103 Mensing Way
Cannon Falls, MN 55009
Letter to be Johanna MT in clear anodized finish.

DHS SEAL TO BE 25" DIAMETER CAST ALUMINUM
AS MANUFACTURED BY:
GENERAL DISPLAY CO.
P.O. Box 1701
9815 FAIRMONT AVENUE
MANASSAS, VA 22110
TELEPHONE: 703-335-9292

Interior Signage

USCIS provides and maintains agency specific interior signage requirements. The Government will provide signage specifications to the Offeror to provide and maintain signage consistency throughout USCIS spaces.

Color Palettes

USCIS color palettes will be incorporated into the space. The Offeror's architect will work with the USCIS PM to establish the color palette during design.

USCIS COLOR PALETTES				
	DARK ACCENT	**MEDIUM ACCENT**	**LIGHT ACCENT**	**WHITE BASE**
	Benjamin Moore	**Benjamin Moore**	**Benjamin Moore**	**Benjamin Moore**
Orange Tone	Masada (AF-220	Classic Caramel (1118)	Putnam (HC-39)	Elephant Tusk (OC-8)
Blue Tone	Blue Danube (2062-30)	Philadelphia Cream (HC-30)	Yellow Freeze (2020-70)	Ocean Air (2123-50)
Red Tone	Apache Red (1295)	Secret (AF-170)	Stonington Gray (HC-170)	White Dove (OC-17)
Green Tone	Guilford Green (HC-116)	Chambourd (AF-645)	Lancaster Whitewash (HC-174)	White Dove (OC-17)
Violet Tone	Mint Violet (1252)	Stardust (2108-40)	Tapestry (975)	White Dove (OC-17)
Tan/Blue Tone	Quincy Tan (HC-25)	Montpeliar (AF-555)	Stonington Gray (HC-170	Seapearl (OC-19)

Building Hours of Operation

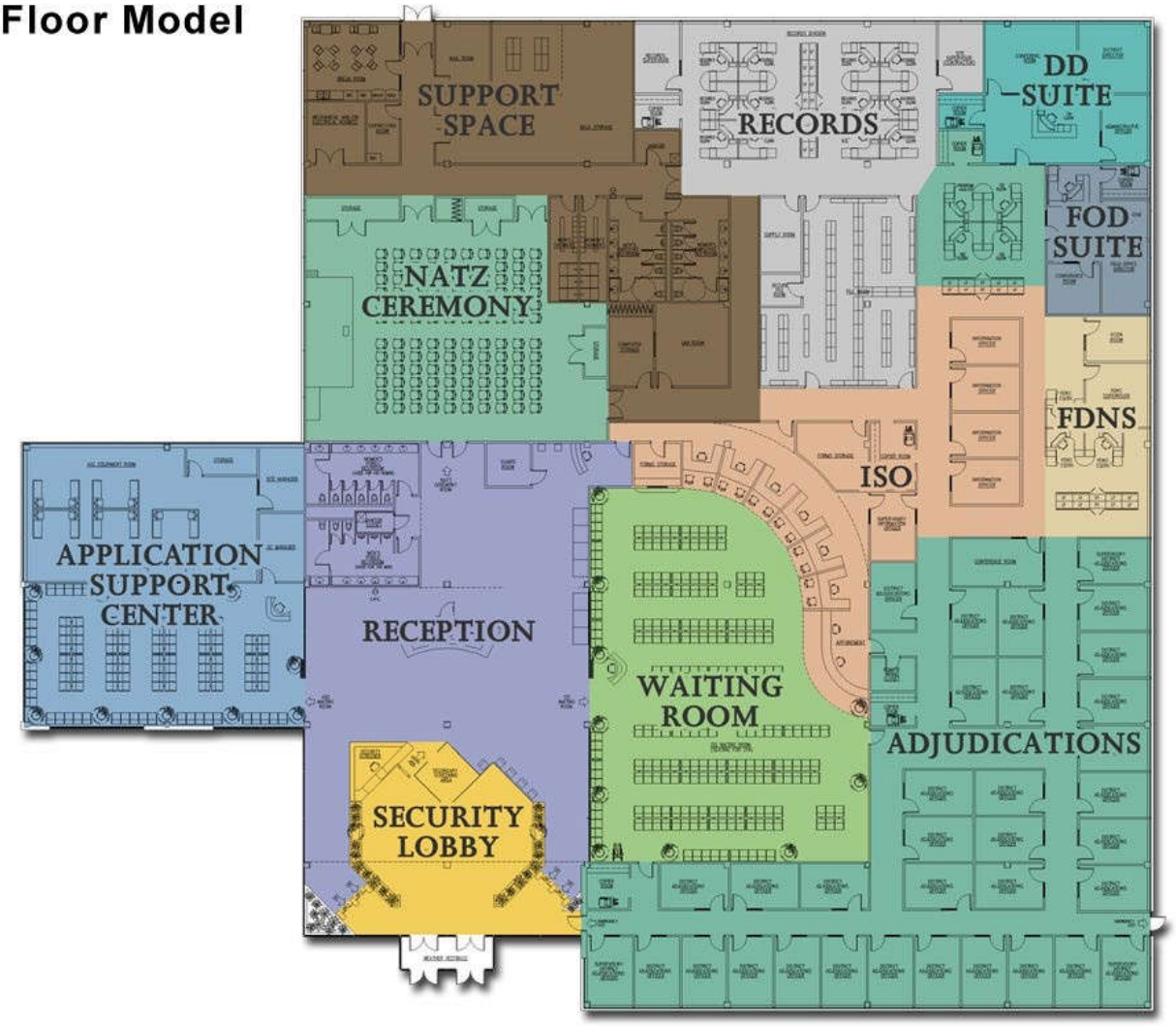
The entire building is considered operational from 7:00am to 6:00pm (PM to verify with the local office.) five days per week (except for Federal Holidays). If an Application Support Center (ASC) is co-located with the USCIS office, the hours of operation are 7:00am to 6:00pm six days per week (except for Federal Holidays) including Saturday. All USCIS space must be capable of having HVAC services on Saturdays. The Computer LAN Room and any wire/telephone closets will require 24/7 HVAC services. USCIS recognizes that utility costs outside of normal operations hours will be paid for as overtime utilities through Government reimbursable work authorization funding.

Test-Fit Layout

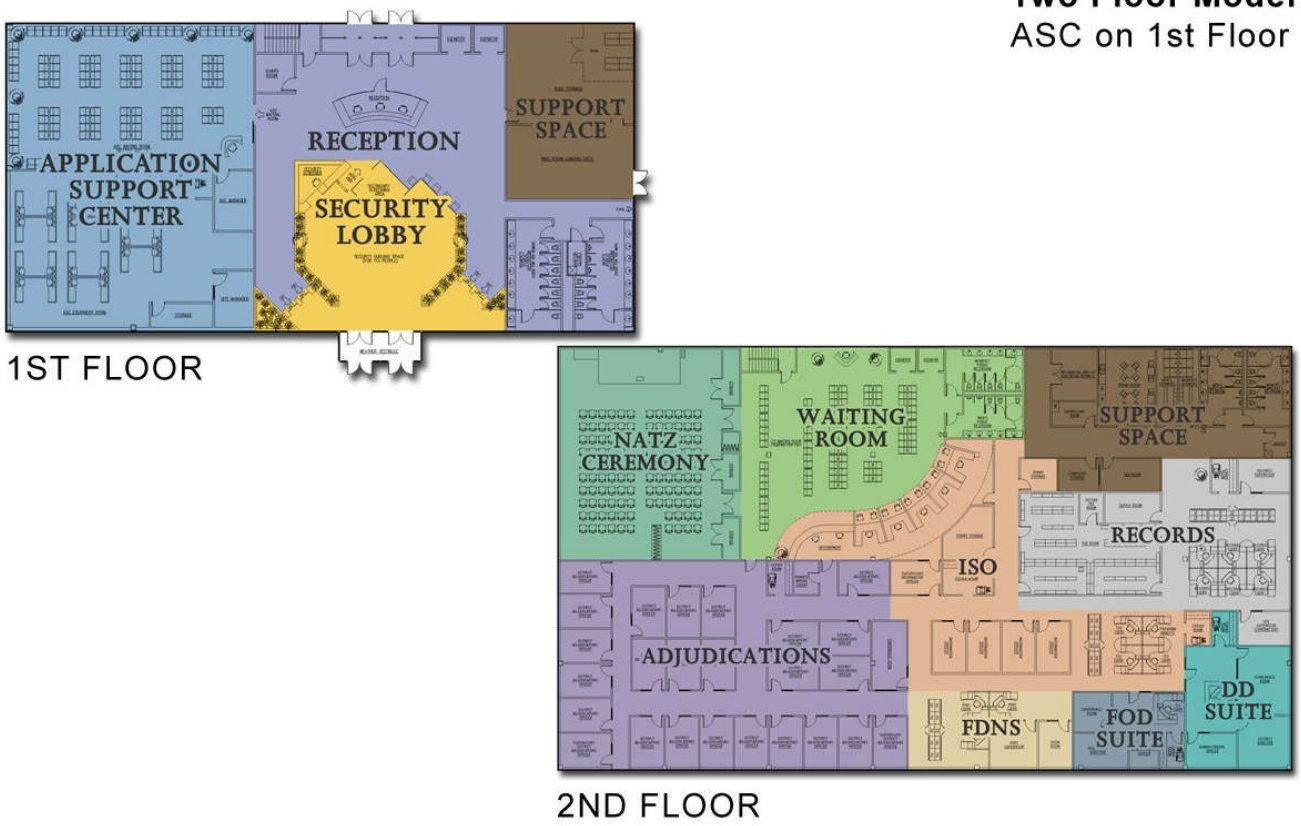
A test fit layout with the necessary office suite area adjacencies must be provided to demonstrate the Offeror's intent to meet the USCIS requirements. This test fit should follow the design criteria to meet adjacencies and room requirements. When designing office square footage requirements less than 20,000 square feet a single floor design will be required. If the office square footages range from 20,000 to 40,000 square feet a contiguous two-floor design can be considered. If the office is more than 40,000 square feet, a contiguous three-floor design can be considered. When a multi-floor occupancy is being offered, vertical circulation will be required for employees.

Model Concept Layouts

Single Floor Model



Two Floor Model
ASC on 1st Floor



District Director's Suite

The District Director (DD) is the individual who is responsible for overseeing the operations of the entire USCIS District which consists of several offices across a large geographical area. This office should occupy a prominent area within the facility. The DD Suite will consist of private offices planned with open office workstations including a waiting area, conference room (typically adjacent to the DD office), copy area, storage, and circulation space.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
District Director	F1	W1	D3	C1	L1	H1	E1		S4
Conference Room	F1	W1	D2	C1	L2	H2	E3	M1	
Deputy Director	F1	W1	D1	C1	L1	H1	E2		
Chief of Staff	F1	W1	D1	C1	L1	H1	E2		
Community Relations Officer	F1	W1	D1	C1	L1	H1	E2		
Special Assistant	F1	N/A	N/A	C1	L1	H1	E4		
Supervisory Operation Support	F1	W1	D1	C1	L1	H1	E2		
Supervisory ISA	F1	W1	D1	C1	L1	H1	E2		

Congressional Liaison	F1	W1	D1	C1	L1	H1	E2		
Section Chief	F1	W1	D1	C1	L1	H1	E2		
Immigration Services Analyst	F1	N/A	N/A	C1	L1	H1	E4		
Training Officer	F1	N/A	N/A	C1	L1	H1	E4		
Operation Support	F1	N/A	N/A	C1	L1	H1	E4		
Management and Program Analyst	F1	N/A	N/A	C1	L1	H1	E4		
Field Security Manager	F1	W1	D1	C1	L1	H1	E2		
OSI Government	F1	N/A	N/A	C1	L1	H1	E4		
Verification Government	F1	N/A	N/A	C1	L1	H1	E4		
Verification Contractor	F1	N/A	N/A	C1	L1	H1	E4		
Copier Area	F1	W2	N/A	C1	L3	H1	E5	M2	
Open Office Space/Circulation	F1	W2	D3	C1	L1	H1	E4		S5

Field Office Director's Suite

The Field Office Director (FOD) is the individual who is responsible for overseeing the operations of the USCIS Field Office location. This office should occupy a prominent area within the facility. The FOD Suite will consist of private offices planned with open office workstations including a waiting area, conference room (typically adjacent to the FOD office), copy area, storage, and circulation space.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
Field Office Director	F1	W1	D3	C1	L1	H1	E1		S4
Deputy/Assistant Director	F1	W1	D1	C1	L1	H1	E1		
Special Assistant	F1	N/A	N/A	C1	L1	H1	E4		
Conference Room	F1	W1	D2	C1	L2	H2	E3	M1	
Congressional Liaison	F1	N/A	N/A	C1	L1	H1	E4		
Section Chief	F1	W1	D1	C1	L1	H1	E2		
Supervisory Counsel	F1	W1	D1	C1	L1	H1	E2		
Counsel	F1	W1	D1	C1	L1	H1	E2		
Communications Officer	F1	W1	D1	C1	L1	H1	E2		
Paralegal	F1	N/A	N/A	C1	L1	H1	E4		
Legal Assistant	F1	N/A	N/A	C1	L1	H1	E4		
Supervisory Immigration Services Analyst	F1	W1	D1	C1	L1	H1	E2		
Operation Support	F1	N/A	N/A	C1	L1	H1	E4		
Production Management Analyst	F1	N/A	N/A	C1	L1	H1	E4		
Quality Management Specialist	F1	N/A	N/A	C1	L1	H1	E4		
Contract Oversight ISA	F1	N/A	N/A	C1	L1	H1	E4		
Supervisory FDNS Immigrations Officer	F1	W1	D1	C1	L1	H1	E2		

FDNS Immigrations Officer	F1	N/A	N/A	C1	L1	H1	E4		
FDNS Immigration Services Analyst	F1	N/A	N/A	C1	L1	H1	E4		
FDNS Management and Program Analyst	F1	N/A	N/A	C1	L1	H1	E4		
IT Support Positions (Contractor)	F1	N/A	N/A	C1	L1	H1	E4		
Computer/ LAN Room	F6	W6	D4	C4	L3	H7	E17	M10	S3, S6
Computer Setup and Storage	F6	W3	D3	C1	L3	H1	E16		
Copier Area	F1	W2	N/A	C1	L3	H1	E5	M2	
Open Office Space/Circulation	F1	W2	D3	C1	L1	H1	E4		S5

Immigration Services

The Immigration Services Division is responsible for interviewing, testing and granting individual's citizenship in the United States of America as well as making adjustments to an immigrant's current status. They are also responsible for providing information and forms to persons seeking legal immigration. The design of this area should reflect the importance of the process and provide a space that is comfortable for both the customer and employee.

The preferred design solution would have all office areas co-located on a single floor with the waiting room. The file room and open office space where clerical and administrative functions are performed should be adjacent or central to this Division's offices. Public and employee circulation areas must be separate.

Information Counters will separate USCIS public and secure spaces. These counters should be welcoming and open while maintaining the security and privacy to both customers and USCIS employees.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
Supervisory ISO	F1	W1	D1	C1	L1	H1	E2	M3, M4	
Immigration Services Officer	F1	W1	D2	C1	L1	H1	E2	M3, M4	
Customer Service ISO	F1	W1	D2	C1	L1	H1	E2	M3, M4	
Asylum Circuit Rider	F1	W1	D2	C1	L1	H1	E2	M3	
FDNS Interview Room	F1	W1	D2	C1	L1	H1	E2		
FDNS Duty Office	F1	W1	D2	C1	L1	H1	E2	M3	
Branch Chief	F1	W1	D1	C1	L1	H1	E2	M3	
Special Needs Office	F1	W1	D1	C1	L1	H1	E2	M3	
Immigration Services Analyst	F1	N/A	N/A	C1	L1	H1	E4		
Copier Area	F1	W2	N/A	C1	L3	H1	E5	M2	
A-File Room	F1/F3	W3	D4	C1	L3	H1	E9	M17	
VTC Conference Room	F1	W1	D2	C1	L2	H2	E3	M1	
Non-VTC Conference Room	F1	W1	D2	C1	L2	H2	E3	M1	
Open Office Space/Circulation	F1	W2	D3	C1	L1	H1	E4	M4	
Waiting Room	F4	W4	D3/D5	C2	L1	H3	E8	M5	S1
Naturalization/Conference Room	F1	W1	D1	C3	L2	H3	E14	M1	
Naturalization Prep Room	F1	W3	D4	C1	L1	H1	E7		
Chair, Table and AV Storage	F1	W2	D7	C1	L5	H1	E13		
Cashier/Forms Storage Area	F1/F3	W2	D4	C1	L3	H1	E9		
Information Counters	F1	W2	D3	C1	L4	H4	E10	M6	S4
HUB Room	F1/F3	W3	D4	C1	L3	H1	E6	M17	

Immigration Services Support Division

The Immigration Services Support Division is where all files and records regarding applicants are maintained. The flooring must be capable of supporting a live load of 100lbs per square foot. File transfers between the Records Division and other Divisions typically involve the use of wheeled carts.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
Records Manager	F1	W1	D1	C1	L1	H1	E2		
Contractor Management Staff	F1	N/A	N/A	C1	L1	H1	E4		
Immigration Services Assistant	F1	N/A	N/A	C1	L1	H1	E4		
Government Clerical	F1	N/A	N/A	C1	L1	H1	E4		
Record's Clerk	F1	N/A	N/A	C1	L1	H1	E4		
Contractor Clerical Staff	F1	N/A	N/A	C1	L1	H1	E4		
Immigration Services Clerk	F1	N/A	N/A	C1	L1	H1	E4		
A-File Room	F1/F3	W3	D4	C1	L3	H1	E9	M17	
FDNS A-File Room	F1/F3	W3	D4	C1	L3	H1	E9	M17	
Secure File Room	F1/F3	W3	D4	C1	L3	H1	E6	M17	
Copier Area	F1	W2	N/A	C1	L3	H1	E5	M2	

Application Support Center

The Application Support Center (ASC) is where immigration beneficiaries have their biometrics (fingerprints, photograph, and/or signature) captured. Customers will have their biometrics taken with the use of special biometric capture machines. Each biometric machine must have an off-white backdrop to allow photographs of the applicants to be taken. The ASC and the associated waiting room should be immediately adjacent to the public lobby and entry security screening because the ASC often operates outside of the Field Office's normal business hours.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
ASC ISO	F1	W1	D1	C1	L1	H1	E2		
ASC Site Supervisor	F1	W1	D1	C1	L1	H1	E2		
Biometric/I-90 Station	F4	W2	N/A	C1	L1	H1	E23	M18	
Supply and Copier Room	F1/F3	W3	D1	C1	L3	H1	E6		
Waiting Room	F4	W4	D3/D5	C2	L1	H3	E8		S1

Joint Use and Office Support Space

The Joint Use and Office Support Space include areas that are shared by all Divisions within the office. The public entry will include weather vestibule and a security screening area. The security screening area, where guards will be posted, will include a walk through metal detector and an x-ray machine.

The Naturalization Ceremony Room is where immigrants will be granted their U.S. citizenship. This room may also be used for multipurpose activities including conferences and training. The HVAC system should be designed to accommodate these occupant loads. A stage will also be included in the design of this room.

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In addition to the employee restrooms, a set of public restrooms should be located adjacent to the lobby space.

A mail room, located near the loading dock/receiving area, will require a dedicated exhaust system and will also include an additional x-ray machine for the screening of packages.

ROOM	FLOOR	WALL	DOOR	CEILING	LIGHTING	HVAC	EDV	MISC	SEC
Break Room	F5	W1	D2	C1	L1	H6	E15	M8	
Chair, Table & A/V Storage	F1	W2	D7	C1	L1	H1	E13		
Bulk Storage	F3	W3	D9	C5	L5	H1	E9	M9	
Employee Men's Restroom	F7	W7	D10	C6	L6	H1	E22	M15	
Employee Women's Restroom	F7	W7	D10	C6	L6	H1	E22	M15	
Computer Training Room	F1	W1	D3	C3	L2	H3	E14	M1	
Guard/PIV Room	F1	W2	D3	C1	L1	H1	E6		
Receiving Area	F3	W3	D9	C5	L5	H1	E9		
Lactation Room	F1/F5	W2	D11	C1	L1	H1	E19	M19	
Showers (Men and Women)	F7	W7	D10	C6	L6	H1	E22	M13	
Mail Room (including X-ray)	F2	W8	D9	C1	L3	H8	E18	M12	S7,S8
Remote Wiring Closet	F6	W6	D4	C4	L3	H9	E20	M11	
Union Office	F1	W1	D1	C1	L1	H1	E2		
Security Queuing Space	F8	W3	D3/D5	C2	L1	H3	E21	M14	S1/S2
Security Screening Stations	F8	W3	D3/D5	C2	L1	H3	E21	M14	S1/S2
HSDN/TALON Room	F1	W5	D8	C7	L1	H5	E12		
Weather Vestibule	F8	W3	D3/D5	C2	L1	H3	E21	M14	S1/S2
Visitor Family Restroom	F7	W7	D10	C6	L6	H1	E22	M16	
Visitor Men's Restroom	F7	W7	D10	C6	L6	H1	E22	M16	
Visitor Women's Restroom	F7	W7	D10	C6	L6	H1	E22	M16	
Field Office Storage Room	F1/F3	W2	D12	C1	L3	H1	E6		

General Notes

In the event a conflict exists between the GSA Request for Lease Proposal (RLP) and the USCIS Special Requirements, the USCIS Special Requirements shall prevail.

1. **Building Classification** – USCIS requires all buildings to be either Class A or Class B, no exceptions.
    a. **Class A** - Most prestigious buildings competing for premier office users with rents above average for the area. Buildings have high quality standard finishes, state of the art systems, exceptional accessibility and a definite market presence.
    b. **Class B** - Buildings competing for a wide range of users with rents in the average range for the area. Building finishes are fair to good for the area. Building finishes are fair to good for the area and systems are adequate, but the building does not compete with Class A at the same price.
2. **Building Entrance** – Wherever possible there should be two entrances to USCIS space. One entrance for employees and one entrance for visitors.

3. **Direct/Indirect Light Fixtures** – Light fixtures shall be direct/indirect and be capable of providing 30-foot candles (unless otherwise noted) of light at work surface height (30"AFF). Lamp color shall be maintained at 3500K and the CRI (Color Rendition Index) must be maintained at a minimum of 80 for the term of the lease unless an alternative light color is approved by the USCIS Facilities Space Management Branch (FSMB). The Lessor shall ensure that the cost of the shell lighting specified in the RLP needs to be subtracted from the total lighting cost in the Tenant Improvement pricing.
4. **Sidelight Assemblies** – Typical sidelight assemblies as required shall be integral with the door frame. If transoms and additional glazing adjacent to the door frame are to be specified in order to achieve LEED points for day-lighting, they should also be integral to the door frame and approved by FSMB prior to being included in the project design.
5. **Surge Protective Devices(s) (SPD)** – SPD will be required and must be located prior to the building's main distribution panel (or at least before the panels/service serving the Government's leased space). The Lessor shall be responsible for replacement of MX modules when a failure occurs and the system indicates the module is defective. The USCIS Information Technology (IT) staff will periodically inspect LED indicator lights and contact GSA/Lessor when LED indicators to show replacement is necessary. The Lessor shall be responsible for providing, installing, and maintaining this system throughout the term of the lease.
6. **Electronic Security System (ESS)** – The Lessor shall furnish and install an operational ESS. The Lessor will maintain the systems during the one year warranty listed to the installer which commences on the date of the facility acceptance. The Government will own and maintain all installed equipment upon expiration of the one year warranty. The ESS will comprise of an HSPD12 Compliant Access Control System (ACS), Intrusion Detection System (IDS), and Internet Protocol Video Surveillance System (IPVSS) that will be capable of operating on an integrated standalone platform which can provide USCIS with the ability to access, monitor, administer and control of all three systems through a single client. The costs of the ESS shall be paid by the Government through the Tenant Improvement Allowance. The complete requirements for the electronic security systems are provided in the attached USCIS Facility Security Specific Requirements (FSSR) for Electronic Security Systems. Refer to paragraph 7.a for POTS line requirements.
7. **Magnetometer and X-ray Machine(s)** – USCIS will provide security equipment to be located within lobby security screening and mailroom. The Lessor shall be responsible for the coordination of the power and data to the equipment.
8. **Building Services** – Demarcation (Voice/Data Requirements) – Provide two (2) – 4-inch conduits (EMT Metallic raceway – inside) with pull strings from the Main building demarcation routed directly in the USCIS LAN/Computer Room. The separate conduit raceways shall be utilized for copper, fiber optic, and CATV service into the facility based on circuit requests/orders submitted by USCIS. Indicated below shall be utilized to determine site requirements. (Note: For new facilities, provide three (3) – 4 inch conduits (PVC – Schedule 80 outside) with pull strings from the Main building demarcation within the facility directly to the Service Provider Utilities for copper, fiber optic, CATV, etc. at telephone pole, enclosure, etc. on the exterior building. Coordination will be required with local Service Providers to identify locations).
    a. **Voice circuit** - copper requirement – The voice lines and circuit requirements shall meet the staffing criteria, which shall utilize copper to deliver service to the Building Demarcation on existing or upgraded infrastructure for implementation that includes approximately 6 analog lines (approx. 6 -12) and Primary Rate Interface (PRI's) 1 for voice applications. Leased construction build-out per lease will require the coordination by the lessor with the local service provider to install the copper cable requirement to support facility for USCIS voice requirement installation. **NOTE: The lessor shall be responsible for shell cost for providing the required amount of analog lines (3) which will connect to the Federal Protective Service Mega Center, LAN Room Environmental Alarm, the local fire alarm, life safety, and any other systems along with the monthly reoccurring costs included in the lease agreement. See Reference E17.**
    b. **Data circuit** - copper requirement – The data circuit requirement shall utilize copper to deliver service to the Facility Demarcation on existing or upgraded infrastructure for implementation of one analog line, Public Switched Telephone Network (PSTN), for monitoring network. Leased construction build-out will require the coordination by the lessor with the local service provider to install the copper cable requirement to support USCIS network deployment per lease agreement. **AND**
    c. **Data circuit** - fiber optic requirement – For office and staffing requirements, the data circuit type shall be DS3 (example: 20Mbps, 100Mbps, DS3, etc.), which requires that the existing fiber optic cable in the facility shall be utilized to support the network. If fiber cable does not exist within the facility or meet needed circuit requirement, coordination is required by the Lessor and the local service provider to install accordingly or upgraded infrastructure included per lease agreement for implementation with the site upgrades to support the USCIS network deployment. Note with existing buildings – The location within the facility where the building demarcation resides (telephone room, electrical closet, etc.) may require site upgrades that may include, but not limited to, the installation of electrical outlets (typically two (2) dedicated L5-15R's or requested equivalent), plywood backing, grounding to the Main Electrical Service, busbar, etc., as part of the Shell requirement..
9. **Cable Management (Data/Voice Cabling)** – The Lessor shall be responsible for the installation of the data and voice cabling. Please refer to the USCIS Structured Cabling Plant Standards attached with the RLP. Each drop location shall consist of two data Category 6 white (2D) plenum cables for each office, workstation or other location indicated during the design phase to support network and voice applications. A wall phone location shall consist of one voice Category 6 white (1V) plenum cable. The Lessor shall be responsible for providing 19" standalone equipment racks with 10" double-sided vertical managers and patch panels for phone and data punch downs along with wire management, shelves, PDU's, and ladder runway above racks in the LAN/Computer Room as highlighted in the USCIS Structured Cabling Plant Standards. A combination of cable basket trays and J-hooks shall be used to distribute the data/voice cabling throughout the building. If quantity exceeds 100 cables, basket trays shall be coordinated with the USCIS Project Manager in FSMB during the 30% construction drawing plan review. Cable trays (basket and ladder) shall be installed per manufacturer's instruction and be coordinated with mechanical ducts, sprinklers, plumbing, etc. to ensure a 12" clearance above the tray from any obstructions. The cost of this work shall be paid by the Government through the Tenant Improvement Allowance. Upon final cost reconciliation of the project, the cost of the data and voice cabling shall be provided to the Government for USCIS budgetary purposes. This work (materials and labor) shall be warranted for the full term of the lease.

10. **Wireless & Overhead Paging Application** – The installation requirements for the USCIS Wireless Application throughout the facility will be included in the build-out of the project. Wireless and overhead paging drop locations will be AFC throughout the facility, with each location consisting of two data Category 6 white (2D) plenum cables. The requirements include plenum cabling, surface boxes, ceiling or wall mounted components, patch panels, wire management, conductivity/termination hardware, patch cables, etc., along with installation labor which will be typically specified in a supplemental attached statement of work (SOW) associated with the USCIS Structured Cable Plant Standards document. Site specific details will be included in the SOW for the requested installation and components to comply with the facility requirements. All AP's (Access Points) and speakers will be provided and installed by the Government following the acceptance and are NOT included with the TI.
11. **Dumpsters (Post Acceptance)** - Lessor to provide two (2) 6-yd dumpsters (estimated) for 60 calendar days, starting one (1) week prior to estimated USCIS/GSA site acceptance (date TBD). One (1) dumpster will be for trash disposal and one (1) dumpster will be for recycling disposal. Lessor has option of providing existing on-site dumpsters or providing temporary dumpsters. If temporary dumpsters are needed, Lessor is responsible for coordinating size, delivery and placement of dumpsters with GSA / USCIS prior to delivery and emptying dumpsters as needed throughout the 60 calendar day period.
12. **Electrical Circuits** – Dedicated circuits will be required in copier areas, HSDN (TALON) Room, security screening lobby and also in the break room. Dedicated outlets shall be a different color than the building standard. Further information and locations will be provided during design.
13. **Standard Duplex Electrical/Data Drop Installations** – Electrical outlets and data drops shall be installed per the industry standard; 18" Above Finished Floor (AFF).
14. **Corner Guards** – USCIS requires corner guards to be installed throughout the facility. Corner guards should be at least 4'-0" high and placement will be determined during design. At a minimum, they will be placed in high traffic areas. The corner guards should be stainless steel or high-impact vinyl. Manufacturer to be InPro or equal.
15. **Systems Furniture Electrical Circuit Configuration** – USCIS utilizes systems furniture workstations in open office space. The USCIS systems furniture vendor will provide the electrical circuit configuration during the design phase. The furniture vendor will provide the necessary electrical whips but it will be the responsibility of the Lessor's electrical contractor to install the power/data connections.
16. **E-Verify** – The Offeror's contractors, subcontractors, cleaning staff and other employees having access to the facility both before and post occupancy must comply with Federal Acquisition Regulation 52.222-54 Employment Eligibility Verification. Only those individuals legally authorized to work in the United States are permitted to be employed either directly or indirectly by the Offeror. Information on registration for the use of the E-Verify program can be obtained via the internet at the Department of homeland Security Web site: http//www.usics.gov/e-verify.
17. **Security Clearances** – USCIS is installing HSPD12 Compliant Access Control Systems in all USCIS Facilities. PIV Access will be required by all contract staff to include the lessor contract staff and his/her designees, lessor's maintenance team and custodian/janitorial staff. Once USCIS has taken occupancy of the space, it is required that all contractors, janitorial and lessor staff requiring routine access to the USCIS space will have completed the required NACI security background check as mandated by HSPD12 for unescorted access during normal working hours. The Government will facilitate, monitor compliance and pay for all required NACI security backgrounds checks for the duration of the lease.
18. **Door Hardware and Keying Control** – USCIS has specific requirements for all door hardware, keying, lockset cores and the control of such. The Lessor shall review and comply with the requirements listed in this document as well as the USCIS Facility Security Specific Requirements. The specific master keying plan will be developed during the design. The implementation and execution of the final plan will be the Lessor's responsibility. The Lessor shall provide a minimum of 3 copies of each lockset key. USCIS will control all keys. The Lessor is responsible for providing and installing a securable key storage box within the USICS space for the storage and/or control of all keys.
19. **Automatic Door Openers** – automatic door openers are required on any entrance door into USCIS space, restroom door and any door that may separate the lobby and waiting room.
20. **Fire Alarm System (FAS) –** The Lessor shall provide, install and maintain a compliant FAS for any building(s) which is occupied by USCIS. The FAS shall be complaint with the space's intended use and meet all applicable NFPA while also meeting all requirements of the local authority having jurisdiction. If the GSA lease requirements and/or the local building codes require a complaint system as part of the building shell, those costs will be included with the shell rent. In this case USCIS will only focus on what is needed for the tenant improvement (TI) fit out and its integration with the shell FAS.
21. **Mass Notification System (MNS) –** As part of the tenant improvements, USCIS will require the design, installation and maintenance of a mass notification system for any space occupied by USCIS. The system and its components will be integrated with the installed FAS. The system and its components shall be installed to comply with NFPA codes and all requirements of the local authority having jurisdiction. The lay-out and placement for all components will be detailed during the design development phase of the scope of work. At a minimum the MNS shall include eight (8) pre-recorded messages, two (2) activation panels with manual voice override and the ability to accept recorded .WAV files at a later date.
22. **Accompanying Attachments**
    a. USCIS Facility Security Specific Requirements
    b. USCIS Computer and Telephone Room Standards
    c. USICS Structured Cable Plant Standards
    d. USCIS Audiovisual Standards
    e. USCIS Signage Standards

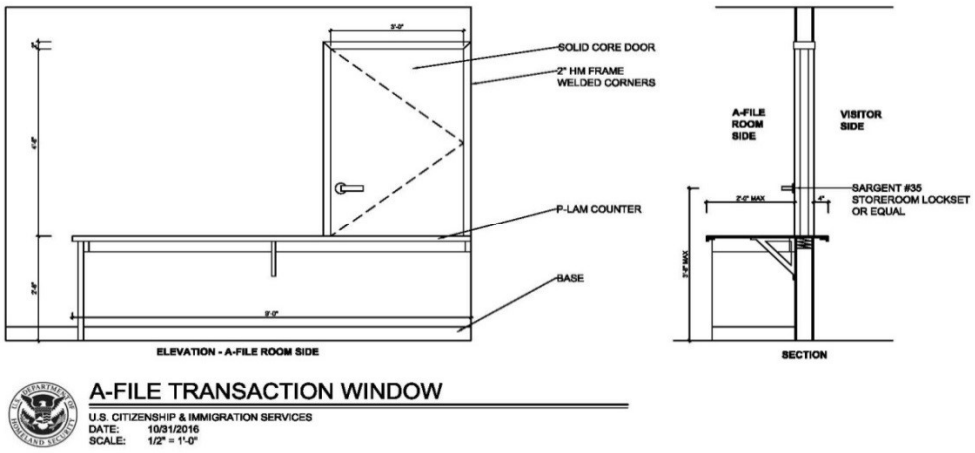
Environmental Considerations

The U.S. Citizenship and Immigration Services make a strong commitment to environmental stewardship. The Offeror should comply with the following requirements which can also be found within the GSA RLP.

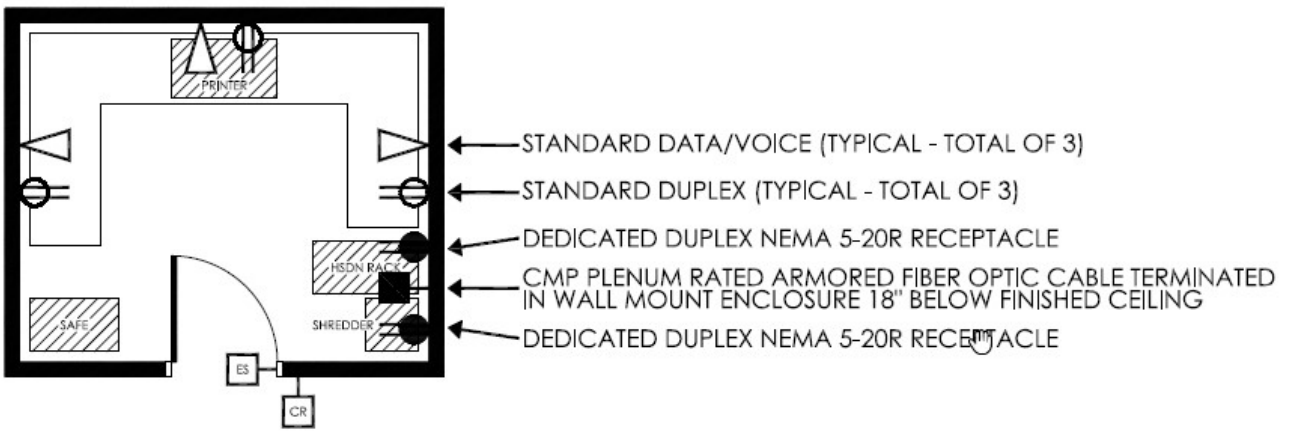
1. **LEED Certification** – The Offeror shall obtain LEED: Interior Design and Construction (ID+C) at a minimum.
2. **Compliances** - The Offeror shall comply to the extent feasible with the Resource Conservation and Recovery Act (RCRA), Section 6002, 1976. The Offeror shall use recycled content products as indicated in the lease and as designated by the U.S. Environmental Protection Agency (EPA) in the Comprehensive Procurement Guidelines (CPG), 40 CFR Part 247, and its accompanying Recovered Materials Advisory Notice (RMAN).
3. **Preferable Products** - The use of environmentally preferable products and materials is encouraged in addition to the consideration of the lifecycle analysis of the product to the initial cost. Some examples may include janitorial cleaning products packaged ecologically, products and equipment considered environmentally beneficial, recycled products that are phosphate free; non-corrosive; nonflammable; fully biodegradable and paper products with recycled content conforming to EPA's CPG.
4. **Construction Waste** - Prior to construction commencement, the Offeror shall submit a proposed plan following industry standards to recycle construction waste. The plan shall quantify material diversion goals and maximize the materials to be recycled and/or salvaged (at least 50 percent) from construction, demolition, and packaging debris.
5. **Recycling** – A building recycling service plan annotating recycling area(s) as part of DID's should be reflected on CD submission. For leased space greater than 10,000 square feet with a term longer than six months, the Offeror shall establish a recycling program for (at a minimum) paper, corrugated cardboard, glass, plastics, and metals where local markets for recovered materials exist. An appropriately sized recycling area (2 SF per 1,000 SF of gross area) should be designed for collection and storage of recycling materials. Telecom rooms are not acceptable as recycling space. The Government, upon request, may request additional information concerning the recycling programs maintained in the building the leased space.
6. **Energy Star** – The Offeror shall achieve Energy Star rating for new construction. The Offeror is encouraged to purchase at least 50 percent of the Government tenant's electricity from renewable sources.
7. **Landscaping** – As required, the Offeror must provide landscape management practices which avoids or minimizes the use of fertilizer and pesticides; prohibits the use of the 2,4-Dichlorophenoxyacetic Acid (2,4-D) herbicide and organophosphates; composted/recycled all yard waste; utilizing landscaping products with recycled content as required by EPA's CPG for landscaping products; and for new construction, where conditions permit, the site shall be landscaped for low maintenance and water conservation with plants that are either native or well-adapted to the local growing conditions.
8. **Plumbing** – The Offeror must provide plumbing fixtures that conform to EPA WaterSense or fixtures with equivalent flush volumes/flow rates.

Typical Design Layouts

A-file Transaction Window



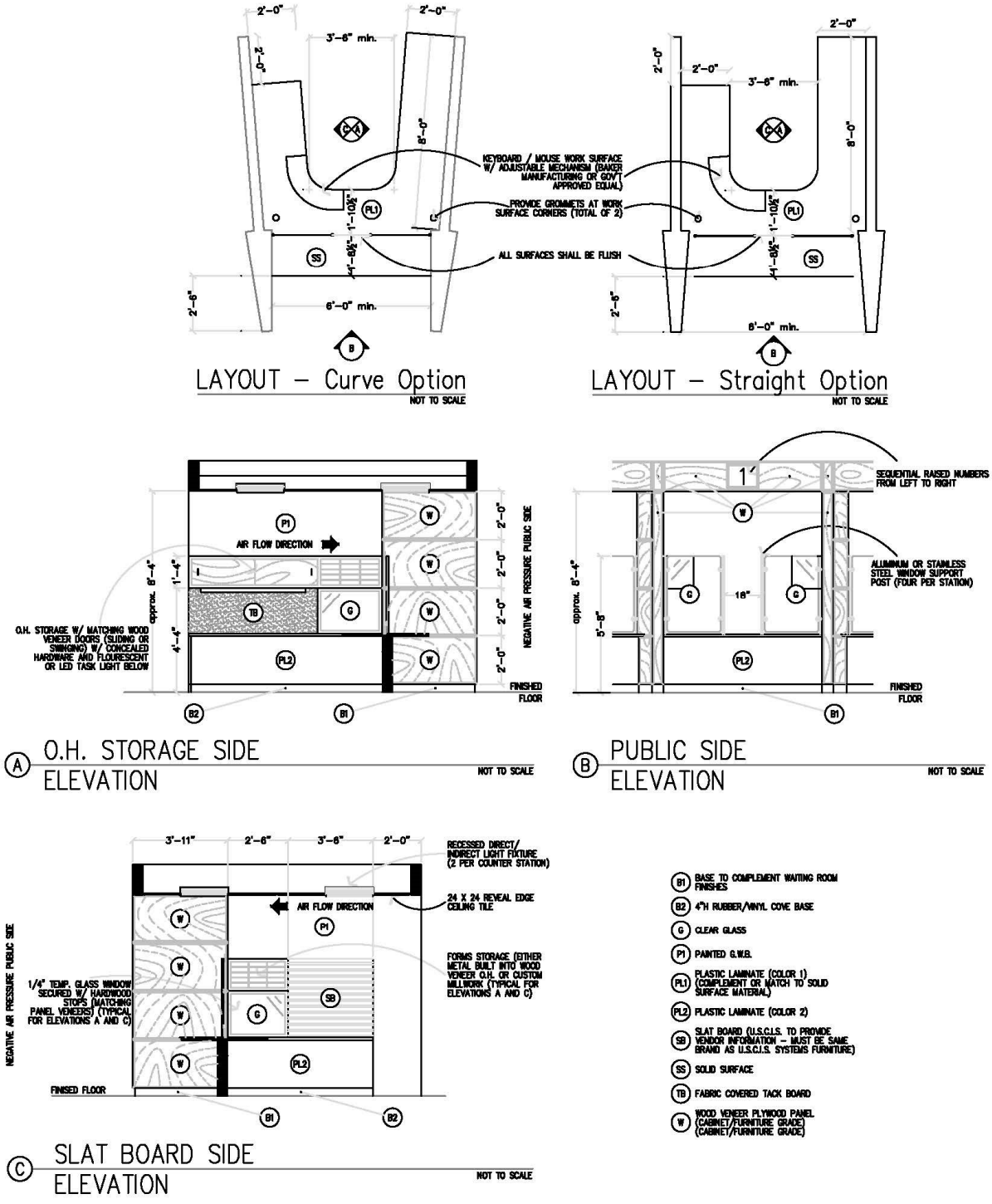
HSDN/TALON Room Configuration



REFER TO U.S.C.I.S. STRUCTURED CABLING SCOPE OF WORK FOR DATA/VOICE AND CMP CABLE REQUIREMENTS

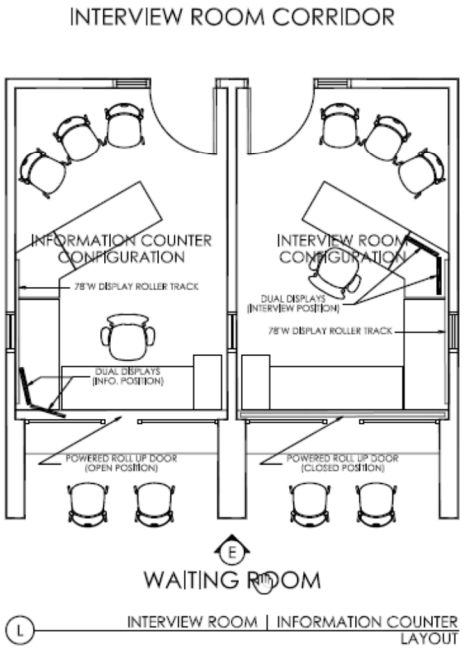
Information Counters

Option 1 – Information Counters

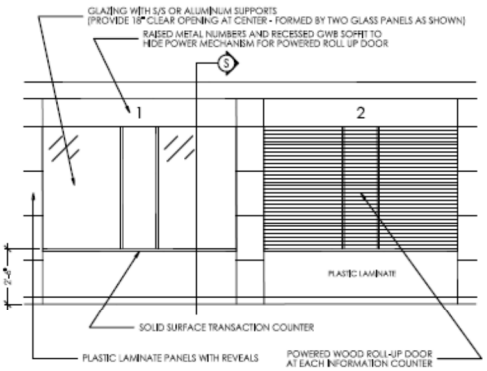


LESS (b) (6) GOVERNMENT: (b) (6)

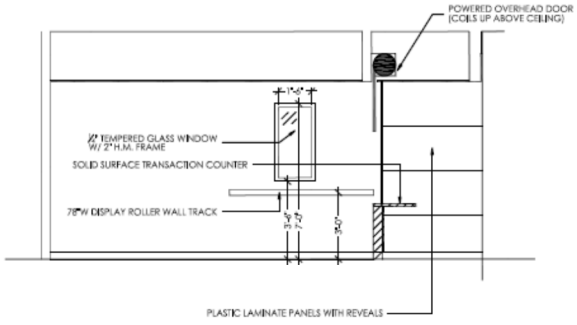
Option 2 – Information Counters



L INTERVIEW ROOM | INFORMATION COUNTER LAYOUT

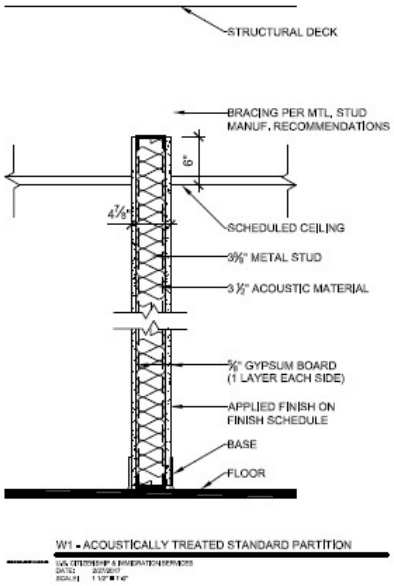


E INFORMATION COUNTER | WAITING ROOM ELEVATION

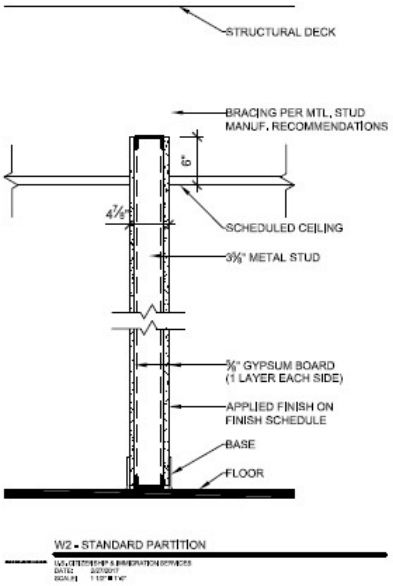


S INTERVIEW ROOM | INFORMATION COUNTER SECTION

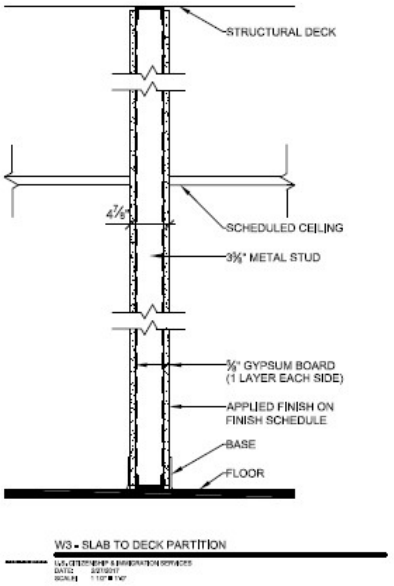
Wall Partition Types



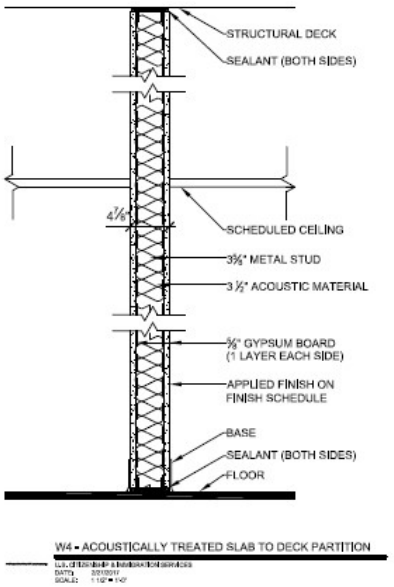
W1 - ACOUSTICALLY TREATED STANDARD PARTITION



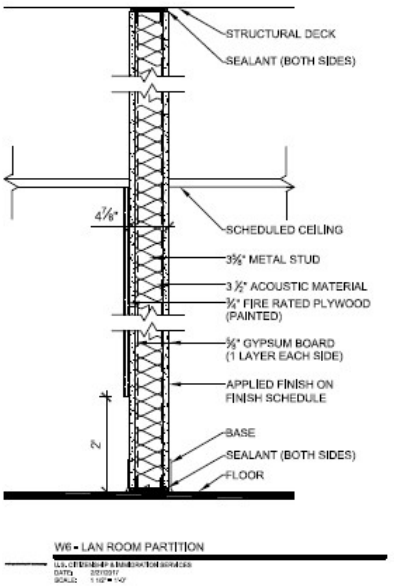
W2 - STANDARD PARTITION



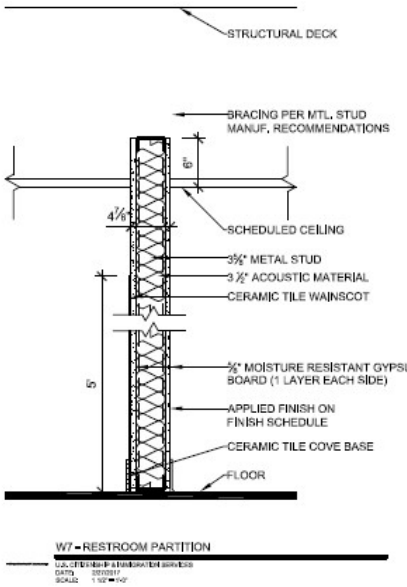
W3 - SLAB TO DECK PARTITION



W4 - ACOUSTICALLY TREATED SLAB TO DECK PARTITION

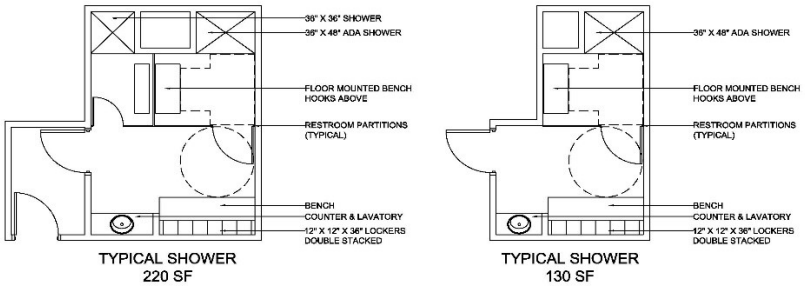


W6 - LAN ROOM PARTITION



W7 - RESTROOM PARTITION

Showers



Schedules

Ceilings

TYPE	DESCRIPTION
C1	TYPICAL OFFICE SPACES Minimum ceiling height 8'-0". 2' X 2' Acoustical Ceiling Tile (ACT) with tegular edges with a minimum 25% recycled content.
C2	PUBLIC ENTRY/SECURITY SCREENING/WAITING ROOM Minimum ceiling height 12'-0". 2' x 2' ACT with tegular edges with a minimum 25% recycled content; or painted exposed deck (spiral duct is required if the deck is exposed); or a combination of high-quality ceiling tile with GWB accents. The Government shall approve the proposed ceiling design.
C3	COMPUTER TRAINING/NATURALIZATION ROOM Minimum ceiling height 10'-0". 2' X 2' Acoustical Ceiling Tile (ACT) with tegular edges with a minimum 25% recycled content. The ceiling may incorporate painted GWB accents at column lines or other areas to enhance the prominence of the room.
C4	COMPUTER ROOM & REMOTE WIRING CLOSET Minimum ceiling height 8'-6". Acoustical Ceiling Tile (ACT) with tegular edges with a minimum 25% recycled content. Space above the ceiling must be free from sprinkler mains, plumbing runs, building HVAC ductwork, condensate drains and HVAC equipment. The adjacent wall must also be free from adjoining plumbing or water pipelines. Restrooms, kitchens, or other similar space shall not be located directly over the LAN/Computer Room.
C5	BULK STORAGE/LOADING & RECEIVING AREA Minimum ceiling height 8'-0". Exposed or painted exposed deck.
C6	EMPLOYEE & PUBLIC RESTROOMS Minimum ceiling height 8'-0". Painted moisture resistant GWB or 2' X 2' GWB tiles.
C7	HSDN/TALON Minimum ceiling height 8'-0". 2' X 2' Acoustical Ceiling Tile (ACT) with tegular edges with a minimum 25% recycled content. Ceiling system will be required to help this room achieve a STC-55 (ASTC-52) rating. Lessor to coordinate one acoustical test during construction (acoustical engineer to provide any necessary recommendations) and one acoustical test after construction to verify STC-55 (ASTC-52) to meet ASTM-E336-17A testing standards with typical field allowances.

Doors

TYPE	DESCRIPTION
D1	LOCKABLE OFFICE Solid Core (SC) hardwood veneer door with commercial-grade mortise hardware (office function lockset) with replaceable core and 2" hollow metal (HM) frame with welded corners. Provide 18" sidelight assembly adjacent to door integral with HM door frame. See General notes #4.
D2	NON-LOCKABLE OFFICE SC hardwood veneer door with commercial-grade mortise hardware (passage function) and 2" HM frame with welded corners. Provide 18" sidelight assembly adjacent to door integral with HM door frame. See General Notes #4.
D3*	SECURE SPACES WITH SIDELIGHT ASSEMBLY SC hardwood veneer door with commercial-grade mortise hardware (storeroom function lockset) with a high-security replaceable core, door closer, and 2" HM frame with welded corners. Provide ESS Access Control System in accordance with USCIS Facility Security Specific Requirements. Devices shall be connected to the ACS's central system. Components are to include contact/contactless card reader, door position switch, a request to exit device and electric strike. Provide 18" sidelight assembly adjacent to door integral with HM door frame. See General Notes #3. Automatic door opener may be required. Kick plate and door protection may be required for doors with high traffic and/or on a file cart path may be required.
D4*	SECURE SPACES WITHOUT SIDELIGHT ASSEMBLY SC hardwood veneer door with commercial-grade mortise hardware (storeroom function lockset) with a high-security replaceable core, door closer, and 2" HM frame with welded corners. Provide ESS Access Control System in accordance with USCIS Facility Security Specific Requirements. Devices shall be connected to the ACS's central system. Components are to include contact/contactless card reader, door position switch, a request to exit device and electric strike. Kick plate and door protection may be required for doors with high traffic and/or on a file cart path may be required.
D5	WAITING ROOM & WEATHER VESTIBULE ENTRY Glass double doors with pivot hardware and magnetic locks. Additional glass panels/sidelights may be required to ensure sightlines are maintained for guards for security. Automatic door opener required.
D6	Not Used.

D7	AUDIO VISUAL & CHAIR STORAGE SC hardwood veneer door with commercial-grade mortise hardware (office function lockset) with a replaceable core, door closer, and 2" HM frame with welded corners.
D8	HSDN/TALON ROOM
	Door and associated door frame to maintain a STC-55 (ASTC-52) rating for the entire room. Door and hardware to be commercial-grade mortise hardware (storeroom function lockset) with a high-security replaceable core, door closer, and all necessary gaskets to maintain the STC rating. Provide ESS Access Control System in accordance with USCIS Facility Security Specific Requirements. Devices shall be connected to the ACS's central system. Components are to include contact/contactless card reader, door position switch, request to exit device, electric strike, automatic door bottom and floor threshold (Pemko 412 PKM or equal). Lessor to coordinate one acoustical test during construction (acoustical engineer to provide any necessary recommendations) and one acoustical test after construction to verify STC-55 (ASTC-52) to meet ASTME336-17A testing standards with typical field allowances.
D9*	BULK STORAGE & MAILROOM 4'-0" x 7'-0" painted hollow metal door with commercial-grade mortise hardware (storeroom function lockset) with a high-security replaceable core, door closer, 2" HM frame with welded corners and kick plates (both sides) from just below the door handle to 3" AFF and the width of the door. Provide ESS Access Control System in accordance with USCIS Facility Security Specific Requirements. Devices shall be connected to the ACS's central system. Components are to include contact/contactless card reader, door position switch, a request to exit device, and electric strike.
D10	RESTROOM/SHOWER ROOM SC hardwood veneer door with push/pull hardware, door closer and 2" HM frames with welded corners. Automatic door opener required.
D11	LACTATION ROOM SC hardwood veneer door with commercial-grade mortise hardware (privacy function) with occupied indicator lockset, replaceable core and 2" HM frame with welded corners.
D12	LOCKABLE ROOM WITHOUT SIDELIGHT Solid Core (SC) hardwood veneer door with commercial-grade mortise hardware (storeroom function lockset) with replaceable core and 2" hollow metal (HM) frame with welded corners.
*	- Doors with ESS: If electric strike opens to non-secure space, install strike latch guard. - All other doors that open into non-secure space: Install non-removable pins at each hinge.

Electrical - Power and Data

TYPE	DESCRIPTION
E1	DISTRICT & FIELD DIRECTOR OFFICES Provide four duplex electrical receptacles, two duplex data (2D) drops and one cable television outlet (CATV).
E2	TYPICAL OFFICE AREAS Provide four duplex electrical receptacles, and one duplex data (2D) drops.
E3	CONFERENCE ROOM Provide a minimum of three duplex electrical receptacles (one on each side and back wall), one quadruplex receptacle on the front wall and one recessed floor outlet coordinated with the conference room table base and equipped with a removable cover or protective slide cover. Provide two duplex data (2D) drops on the front wall, one duplex data (2D) drop on the back wall and one duplex data (2D) drop terminated on the surface of the conference table through the recessed floor box. Provide CATV on the front wall in coordination with the AV design. Refer to the USCIS AV Standards document for conduit infrastructure and plywood backing layout within the wall for Government provided wall mounted LCD's.
E4	OPEN AREA PLANNING/SYSTEMS FURNITURE Provide one duplex data (2D) drop and one electrical connection per each system furniture unit (no power poles). There will be approximately 23 system furniture units. Include at least one duplex electrical receptacle and duplex data (2D) drop on open walls identified during design planning for network printers and fax machines.
E5	COPIER AREAS Provide one dedicated duplex electrical receptacle and one duplex data (2D) drop per copier. Provide two duplex electrical outlets and one duplex data (2D) drop at counter height.
E6	GUARD/PIV ROOM/STORAGE/STAGING ROOM Provide two duplex electrical receptacles and one duplex data (2D) drop.
E7	NATURALIZATION PREP ROOM Provide four duplex electrical receptacles and a minimum of one duplex data (2D) drop.

E8	WAITING ROOM Provide convenience duplex electrical receptacles as identified during the design planning. Provide additional duplex electrical receptacles, duplex data drops and CATV outlets for AV design at a ratio of one set per every 500 square feet. Refer to the USCIS AV Standards document for conduit infrastructure and plywood backing layout within the wall for Government provided wall mounted LCD's. Provide one wall phone (1V) location at 54" AFF at each ISO entrance into the waiting room on the secure side of the door for overhead paging.
E9	Provide duplex electrical receptacles and duplex data (2D) drops at a ratio of one per 300 square feet (minimum of one each).
E10	INFORMATION COUNTERS Each station shall be equipped with one duplex data (2D) drop, one duplex electrical receptacle and one quadruplex receptacle. Provide one duplex electrical receptacle and one duplex data (2D) drop on open walls for network printers and fax machines.
E11	Not Used.
E12	HSDN/TALON ROOM

	Provide three (3) duplex electrical receptacles, two (2) dedicated 20 amp circuits each with duplex NEMA 5-20R receptacles (one for the HSDN cabinet and one for the NSA approved shredder). Install one (1) CMP – plenum rated armored fiber cable in wall-mount enclosure at 18" below the finished ceiling directly above the HSDN rack and three (3) standard data drops. Refer to USCIS Structured Cable Plant Scope of Work for site specific requirements. Electrical receptacle and data drop locations shall maintain a STC-55 (ASTC-52) rating. Lessor to coordinate one acoustical test during construction (acoustical engineer to provide any necessary recommendations) and one acoustical test after construction to verify STC-55 (ASTC-52) to meet ASTM-E33617A testing standards with typical field allowances.
E13	AUDIO VISUAL & CHAIR STORAGE Provide three duplex electrical receptacles and one duplex data (2D) drop. Provide one duplex electrical receptacle and one empty single-gang box mounted horizontally at 30" AFF with two conduit stubs AFC along with plywood backing in the wall for AV equipment enclosure. Refer to the USCIS AV Standards document for conduit infrastructure layout within the wall.
E14	TRAINING/NATURALIZATION ROOMS Recessed Floor: Provide recessed floor outlets containing one duplex data (2D) drop and one duplex electrical receptacle which shall be flush with the finished floor and equipped with a removable cover or protective slide covers. Exact quantity will be determined during design. Front Wall AV: Provide a minimum of one quadruplex electrical receptacle, one duplex data (2D) drop, and one CATV outlet. Provide additional conduit and box infrastructure for AV equipment along with plywood backing for Government provided wallmounted projector screen or LCD monitor and speaker locations. Ceiling: Provide one duplex electrical receptacle and one duplex data (2D) drop in ceiling tile approximately 14'-0" off the front wall for the Government provided projector, if applicable. Back Wall: Provide one duplex electrical receptacle and one duplex data (2D) drop on the back wall. Side Walls: Provide one duplex electrical receptacle and one duplex data (2D) drop on the side wall for instructor podium, if applicable. Provide duplex electrical receptacles with multiple circuits for computers and duplex data (2D) drops (minimum quantity (12) on side walls). Refer to the USCIS AV Standards document for conduit infrastructure
E15	BREAKROOM Provide three duplex electrical receptacles and one wall phone (1V) location at 54" AFF. Provide two (unless otherwise indicated during the design planning) dedicated duplex electrical receptacles for refrigerators and two dedicated duplex electrical receptacles for vending machines. Provide two dedicated electrical receptacles for microwave ovens above the counter. Provide two additional duplex electrical receptacles above the counter (GFI as required by code). Provide one duplex electrical receptacle, one duplex data (2D) drop and one CATV drop on the wall at 12" BFC for AV Digital Signage. Refer to the USCIS AV Standards document for conduit infrastructure and plywood backing layout within the wall for Government provided wall mounted LCD's.
E16	COMPUTER STORAGE AND STAGING ROOM Provide four duplex electrical receptacles on two 20 amp electric circuits and six duplex data (2D) drops.

E17	COMPUTER LAN ROOM Provide a recessed independent electrical panel in this room for all circuits (except lighting). The electrical panel must have 25% space capacity and a secondary ground connection to the TMGB within the room. Provide emergency power off button with a protective cover located adjacent to the door(s) that will shut down all power for electrical panels in this room. The installation of the grounding/bonding system shall follow the requirements in accordance with BICSI-J-STD-607-A and ANSI/TIA/EIA-606 standards for labeling along with the NEC (National Electrical Code). Bonding conductor shall originate for the Electrical Entrance Facility to the TMGB typically with 3/0 AWG due to length. Building steel may only be utilized as a secondary connection. A #6 AWG copper ground shall be utilized for the bonding equipment within this room for racks, ladder runway equipment, etc. Provide a minimum of eight (8) dedicated 30 amp 125/120 volt, NEMA L14-30R, 3P, 4W, grounding, locking receptacle with twist-lock outlets mounted in the ceiling tiles above equipment racks and cabinets. Provide one dedicated, L-5 twist-lock 125 volt 30 amp outlet (NEMA L5-30R) and one dedicated L-6 twist-lock 220 volt 30 amp outlet (NEMA L6-30R) and one dedicated 110 volt 20 amp outlet (NEMA 5-20R for security equipment requirements. Provide a minimum of six (6) dedicated duplex 110 volt 20 amp outlets (NEMA 5-20R) and a minimum of four (4) dedicated quadruplex 110 volt 20 amp outlets (NEMA 5-20R) receptacles on the wall behind the equipment racks and on side walls. Data/Voice – Provide one duplex data (2D) locations (near security system and back wall) and two wall phone (1V) locations at 54" AFF (front wall near door and back wall). Provide two (2) 4" conduits EMT raceways with pull strings to the location (Telephone Room, Electrical closet, etc.) within the facility where the building demarcation resides (typical of existing facilities). USCIS will contract requirements and coordinate with service providers to pull required cable type in these raceways to extend voice and data circuits along with CATV services into the LAN/Computer Room. A 24" ladder runway shall be installed above two-post stand-alone equipment racks, enclosures and cabinets to provide cable management from side to side and front to back of the room. Provide a minimum of 4' clearance behind and 3' clearance in front of two-post stand-alone equipment racks. Provide a minimum 4' clearance behind and 3' clearance in front of the four-post equipment racks, enclosures, and cabinets. Provide Category 6 patch panels, 3U, 2U, 1U horizontal wire managers, 19" shelves, PDU's and 10" vertical wire management on 19" stand alone equipment racks, etc. to support Cat 6 cable duplex (2D) locations and single voice Cat 6 (1V) wall phone plates throughout floor space. The building lessor is responsible for providing two analog telephone lines (POTS) for the duration of the lease term. One is provided for the IDS reporting to the FPS MegaCenter. One is provided for the environmental alarm system within the LAN Room.
E18	MAILROOM Provide dedicated electrical service for the X-Ray machine. Provide four duplex electrical receptacles. Provide three duplex data (2D) drops. Provide one wall phone (1V) location at 54” AFF. Some outlets may be required to be located at counter
	height. Depending on the final size and layout of this room, the exact quantity and location of electrical receptacles and data drops will be determined during design.
E19	LACTATION ROOM Provide three duplex electrical receptacles and one at counter height. Provide one wall phone (1V) location at 54” AFF.
E20	REMOTE WIRING CLOSET Provide an independent recessed electrical panel in this room for all circuits (except lighting). The electrical panel must have 25% space capacity and a secondary ground connection to the TMGB within the room. Provide emergency power off button with a protective cover located adjacent to the door(s) that will shut down all power for an electrical panel in this room. The installation of the grounding/bonding system shall follow the requirements in accordance with BICSI-J-STD-607-A and ANSI/TIA/EIA-606 standards for labeling along with the NEC (National Electrical Code). Bonding conductor for TR shall originate for the TMGB within the LAN/Computer Room typically with 3/0 AWG due to length. Building steel may only be utilized as a secondary connection. A #6 AWG copper ground shall be utilized for the bonding equipment within this room for racks, ladder runway equipment, etc. Provide a minimum of four (4) dedicated 30 amp 125/120 volt, NEMA L14-30R, 3P, 4W, grounding, locking receptacle with twist-lock outlets mounted in the ceiling tiles above equipment racks. Provide a minimum of four (4) dedicated duplex 110 volt 20 amp outlets (NEMA 5-20R) and a minimum of two (2) dedicated quadruplex 110 volt 20 amp outlets (NEMA 5-20R) receptacles on the wall behind the equipment racks and on side walls. The types and quantity of electrical receptacles may be updated after lease award and during the design phase due to changing technologies. Data/Voice – Provide one wall phone (1V) locations at 54" AFF. An 18" ladder runway shall be installed above two-post stand-alone equipment rack(s) to provide cable management from side to side and front to back of the room. Provide a minimum of 3' clearance behind and 3' clearance in front of two-post stand-alone equipment rack(s). Provide Category 6 patch panels, 3U, 2U, 1U horizontal wire managers, 19" shelf, PDU's and 10" vertical wire management on 19" stand-alone equipment rack(s,), etc. to Cat 6 cable duplex (2D) locations and single voice Cat 6 (1V) wall phone plates throughout floor space.
E21	SECURITY SCREENING/WEATHER VESTIBULE Provide two dedicated duplex electrical receptacles and two duplex data (2D) drops per each Guard Desk location. Provide two duplex electrical receptacles and two duplex data (2D) drops per Reception Desk location. Provide one duplex electrical receptacle and one duplex data (2D) drop for each Info/Pass kiosk. Some outlets may be required to be located at counter height.
E22	EMPLOYEE & PUBLIC RESTROOMS Provide a minimum of one GFI electrical outlet at counter height.
E23	BIOMETRIC STATIONS Provide a minimum of one dedicated duplex electrical receptacle and one duplex data (2D) drop per biometric machine location. Provide one convenience duplex electrical receptacle on the back wall.

Flooring

TYPE	DESCRIPTION
F1*	TYPICAL OFFICE AREAS Carpet tile consisting of minimum requirements: Antron fiber type 6,6 nylon, 3.0 TARR, 18 ounce face weight, 5,000 density, 1/10 gauge, 8 stiches per inch. In higher traffic areas (corridors, etc.) the TARR and density should be increased: 3.5 TARR, 5,500 density. Note: If the room is an A-file room or will be used for storage, the floor load must be able to support 100 psf.
F2*	MAILROOM Vinyl Composition Tile (VCT), Luxury Vinyl Tile (LVT), Recycled Rubber or Linoleum (such as Marmoleum or equivalent).
F3	BULK STORAGE/STORAGE ROOM Concrete with a commercial grade opaque sealer. The floor must be capable of supporting a live load of 100 lbs. per square feet.
F4*	WAITING ROOMS/BIOMETRIC AREA - Option 1: Carpet tile, Antron fiber type 6,6 nylon, 3.5 TARR (Severe) or higher, 22 ounce face weight - Option 2: Kinetex knitted textile composite floor tiles, 3.5 TARR (Severe) or higher. Flooring manufacturer to be consulted for specific installation guidelines that must be followed and adhesive that must be used to achieve a valid warranty. - Option 3: Any combination of Option 1 carpet, Option 2 Kinetex and luxury vinyl tile with minimum requirements: 40mil wear layer, 5mm overall thickness with built-in foam cushion backing to provide comfort and additional sound deadening. An adhesive that works under all flooring selections shall be used.
F5	BREAKROOM Commercial grade Linoleum Flooring (such as Marmoleum or equivalent). Installation should include a decorative pattern using two or more colors compatible with the USCIS color palette being used.
F6	COMPUTER ROOM/IT STAGING/REMOTE WIRING CLOSET Grounded, static dissipative rubber flooring or static dissipative VCT.
F7	EMPLOYEE & PUBLIC RESTROOMS Ceramic Tile or Quarry Tile floor with matching cove base.
F8*	LOBBY/SECURITY SCREENING/WEATHER VESTIBULE - Option 1: Terrazzo, terrazzo tile, or slip-resistant porcelain floor tile, or other approved flooring with matching base. - Option 2: Luxury vinyl tile with minimum requirements: 40mil wear layer, 5mm overall thickness with built-in foam cushion backing to provide comfort and additional sound deadening.
*	Maintenance:
	- Antron – High-traffic areas/areas near exterior doors: hot water extraction twice annually – no shampoo; vacuum daily; spot check/clean daily. - Antron – All other areas: hot water extraction once annually – no shampoo; vacuum weekly; spot check/clean daily. - LVT - Hot water extraction twice annually – no shampoo. Monthly – microfiber mop with pH neutral solution and rinse with wet mop. Weekly – wet mop. Spot check/clean, wet mop, dry mop daily. - Textile composite floor - Hot water extraction twice annually – no shampoo; Vacuum daily; Spot check/clean daily.

HVAC - Mechanical

TYPE	DESCRIPTION
H1	TYPICAL OFFICE AREAS Building standard to meet ASHRAE business occupancy.
H2	CONFERENCE ROOM Independent HVAC zone with a thermostat in this room.
H3	ASSEMBLY SPACES Independent HVAC zone with a thermostat in this room. Provide air changes per ASHRAE standards for assembly.
H4	INFORMATION COUNTERS Ventilation shall be arranged to ensure that the air flows from the USCIS Immigration Services Officers (ISO) side to the public side of the counter (i.e. positive air pressure at the information counter and negative air pressure in the waiting room).
H5	HSDN/TALON ROOM Independent HVAC zone with thermostat in this room capable of providing a recommended 0.2 tons of cooling. Mechanical equipment and ductwork within and above this room shall maintain a STC-55 (ASTC-52) rating. Lessor to coordinate one acoustical test during construction (acoustical engineer to provide any necessary recommendations) and one acoustical test after construction to verify STC-55 (ASTC-52) to meet ASTM-E336-17A testing standards with typical field allowances.

H6	BREAK ROOM Independent HVAC zone with thermostat in this room. In order to keep odors from penetrating other parts of the building, provide filtered exhaust air if air is being mixed back into the air supply or exhaust directly to the outside.
H7	COMPUTER ROOM The mechanical system for this specialized space shall be a dedicated standalone unit, capable of maintaining a space temperature set point of no higher than 75º F. In addition of maintaining the space temperature for the room, the designed unit will also maintain a relative humidity set point of between 45% RH and 60% RH. The set points for relative humidity and temperature will be maintained twenty-four hours per day, seven days a week regardless of surrounding space temperature or outside conditions. The mechanical equipment for this room will be designed and placed to properly condition the space while taking into account the spatial requirements for USCIS IT equipment, mounting racks, required service clearances, protecting IT equipment from damage, proper air movement across equipment and other factors determined during the design of this room. It is critical that the system be properly designed and installed so that the room and all installed equipment can maintain the specified set points and operational requirements. USCIS shall provide detailed information to the Lessor on all government provided equipment cooling load requirements, power load diversity, future growth and equipment lay-out for what will be installed in this room. For initial planning purposes, the Lessor shall assume that the mechanical equipment is to be sized to handle a total cooling load of 48,000 btu/hr for the USCIS equipment that will be installed in the room. Final equipment sizing will be determined during the design. The mechanical equipment provided to condition this space will be paid for through the tenant improvement allowance. The lessor shall maintain all through the term of the lease.
H8	MAILROOM Mechanical systems in this room can be stand alone or integrated into the building system. A dedicated exhaust that exhausts to the exterior of the building is required. This room should have negative air pressure from the remainder of the building. Provide a supply air shut off button with protective cover for this system located within the mail room. This emergency power off button (EPO) will eliminate all supply air into the space thereby increasing the negative air pressure in the event of an emergency. The EPO button must also be tied into the security system and alarmed with audio/visual equipment. This alarm activation shall notify directly to the Mega Center and guard desk. Refer to USCIS Field Security Specific Requirements. Contractor to perform a smoke test using a smoke tube under the supervision of the USCIS project manager for each interior door entering the mail room to demonstrate the room is under negative pressure. Tests shall be performed for each door under normal mechanical operation as well as after the EPO has been activated.
H9	REMOTE WIRING CLOSET Provide a dedicated standalone mechanical system to condition this space. All requirements for the space and installed equipment will be similar to what is listed for the type H7 space and its description listed above. For initial planning purposes, the Lessor shall assume that the mechanical equipment will be sized to handle a total cooling load of 12,000 btu/hr for the equipment that will be installed by USCIS. Final equipment sizing will be determined during the design.

Lighting

TYPE	DESCRIPTION
L1	TYPICAL OFFICE AREAS Direct/indirect lighting providing 30-foot candles at 30" AFF.
L2	CONFERENCE/NATURALIZATION ROOMS Direct/indirect lighting providing 30-foot candles at 30" AFF on a dimmer. Accent lighting locations to be determined during the design planning.
L3	SUPPORT AREAS Direct/indirect fixtures providing 50-foot candles at 30” AFF.
L4	INFORMATION COUNTERS Provide task lighting under overhead storage unit within millwork. Provide direct/indirect lighting providing 30-foot candles at 30" AFF for each information counter (employee side). Provide one accent light on public side.
L5	RECEIVING/BULK STORAGE Providing 50-foot candles at 30" AFF.
L6	EMPLOYEE AND PUBLIC RESTROOMS Moisture resistant fixtures providing 30” foot candles at 30” AFF.
L7	Not Used

Miscellaneous

TYPE	DESCRIPTION
M1	CONFERENCE ROOMS/TRAINING ROOM/NATZ CEREMONY ROOM Provide wall bracing for Government provided bracket/LCD television/monitor (the LCD television/monitor will weigh approximately 125 lbs.). Refer to the USCIS AV Standards document for location. Provide a continuous hardwood chair rail around the room.
M2	COPIER AREAS Unless otherwise indicated by the Government, provide and install millwork 6'-0" wide base and wall cabinets with plastic laminate post-form counter/integral backsplash.
M3	ISO OFFICES Provide a chair rail on the wall behind the visitor chairs. Wall protection system shall be manufactured by InPro or equal, color to match wall paint color.
M4	STAMP LOCKER Based on the design plan, a wall mounted recessed bank of Stamp and Ink Lockers may be requested for secure storage and shall be installed within the Adjudication office area. The quantity of the lockers will be determined by the total number of ISOs. A suggested vendor source is Fasco Security Products – Model #FLC-707-4W. During the design phase, stamp lockers may be requested to be part of the furniture installation which the agency's vendor will install. Each locker must be keyed separately with the entire system on a master key system.
M5	WAITING ROOMS Provide and install wall bracing for Government provided bracket/LCD television/monitor (the LCD television/monitor will weigh approximately 125 lbs.). Refer to the USCIS AV Standards document for location.
M6	INFORMATION COUNTERS Glazing – All glass shall be ¼" clear tempered glass. Windows between stations shall have trim to match the millwork. Transaction counter window shall be supported in place by an aluminum support assembly that will allow for different glass sizes to be changed out in the future. The distance between glass panels should be no greater than 18". Millwork – Provide and install an adjustable keyboard/mouse tray as part of the plastic laminate counter. The mechanical lift mechanism shall be manufactured by Baker Manufacturing or approved equal. Plastic Laminate – Provide and install on the employee side work surface as well as the vertical surface under the counter on the public side. Provide a minimum of two grommets in the work surface on the employee side, located during design. Overhead Storage – Provide required overhead storage with task lighting as indicated on Typical Information Counter Station. Slat Board – Provide and install a slat board with file/storage tray accessories. The Government shall provide the vendor information and contact for coordination of the installation. Solid Surface – Provide and install a solid surface counter material on the public side of the counter. This solid surface material shall be coordinated with the other workstation finishes. Tack board – Provide and install a fabric covered tack board. The Government shall provide the vendor information and contact for coordination of the installation. Fabric selection to be coordinated with the workstation finishes. Wood – All plywood veneers shall be Grade A (furniture/cabinet grade) on the finished side with beveled or radius trim to match.
	The wood species should be chosen to complement the other materials used for the millwork. See Typical Information Counter Station Diagram.
M7	Not Used.
M8	Provide wall mounted bulletin boards with lockable hinged glass doors. The break room must be accessible to ASC personnel if applicable.
M9	Approximately 75 Net Useable Square Feet (NUSF) shall be separated within Bulk Storage with a lockable cage area. The cage frame and associated door/gate with locking hardware shall extend from slab to deck and be constructed of chain link and metal

M10	LAN/COMPUTER ROOM View Window – Provide and install 4'-0" x 3'-0" x ¼" tempered glass window with 2" HM frame with welded corners between LAN/Computer Room and the Computer Staging Room. The frame should be installed to match the door height. Alarms – Provide an audible and visual alarm for humidity, smoke, and heat outside of the room above the door entry. Alarms shall be connected to sensors inside the room. The alarm system must be on a telephone dialer separate from the building fire alarm system and will need to notify an employee designated by USCIS Field Office. Fire Suppression System – A standard building fire suppression system shall be installed in the LAN/Computer Room when a sprinkler system by code is required. Additionally, type ABC fire extinguishers (trash, paper, wood, liquids, grease, and electrical equipment) will be required adjacent to each door exiting the room. Extinguishers shall be non-corrosive such as Ansul Clean Guard with Dupont FE-36 or equal. Any associated plumbing lines shall not be located above this room or within the walls defining this room.
M11	REMOTE WIRE CLOSET Fire Suppression System – A standard building fire suppression system shall be installed in the TR/IT Closet when located in buildings that are required to have a sprinkler system by code.
M12	MAILROOM Provide and install base and wall cabinets with a variety of opening sizes that will be at desk and standing height. The exact design will be site specific and determined during the design phase. The room should be located on an exterior wall if possible. If located on the 1st floor it should include an exterior door.
M13	SHOWER ROOM Provide and install shower enclosures with associated mixing valves equipped with anti-scalding devices and shower heads. Shower rod and curtain must be included. Unless otherwise indicated, provide and install no more than twelve 12"W x 12"D x 36"H double stacked wall lockers with integral top and 4" base per shower room. Locker room benches are to be provided and bolted to the floor. Final number to be determined by design process.
M14	LOBBY AND SECURITY SCREENING USCIS will provide 1 InfoPASS (appointment scheduling system) kiosk(s) that will be located either before security screening or immediately after based on the specific site design. Every two kiosks will require one electrical duplex receptacle and one data/voice (2D) drop (minimum of one each). Provide a minimum of one mechanical turnstile or exit gate to allow for control of exiting traffic.
M15	EMPLOYEE RESTROOMS Provide and install lease required toilet fixtures with ceiling hung partitions and doors. Each stall must include a coat hook on the inside face of the door, a disposable toilet seat cover dispenser and a toilet paper dispenser. Additionally, provide and install lease required urinals with ceiling/wall suspended privacy partitions. Fixtures should not be visible when the door entry is open. Provide and install grab bars, etc. in handicapped accessible stalls. Provide and install solid surface counters with lease required under counter lavatories, soap dispensers, mirrors, and energy efficient electric hand dryers. Hot water temperature should be set at 105º F. Provide and install a floor drain in each restroom. All fixtures (lavatories, toilets, and urinals) shall be operable by motion sensor. One designated employee water fountain should be equipped with a water bottle filling station in close proximity to the employee restrooms. This restroom must be accessible to ASC personnel if applicable.
M16	VISITOR RESTROOMS Provide and install 8 toilet fixtures with ceiling hung partitions and doors. Each stall must include a coat hook on the inside face of the door, a disposable toilet seat cover dispenser and a toilet paper dispenser. Additionally, provide and install 2 urinals with ceiling/wall suspended privacy partitions. Fixtures should not be visible when the door entry is open. Provide and install grab bars, etc. in handicapped accessible stalls. Provide and install solid surface counter with 8 (four per gender restroom) under counter lavatories, soap dispensers, mirrors, and energy efficient electric hand dryers. Hot water temperature should be set at 105º F, if practical. Provide and install a floor drain in each restroom. All fixtures (lavatories, toilets, and urinals) shall be operable by motion sensor. Provide baby changing station in each visitor restroom. Note: These restrooms are in addition to the employee restrooms that are included in the Request for Lease Proposal (RLP). These restrooms must have services, utilities, etc. on Saturdays to allow the Application Support Center (if included with the site) to be operational. HVAC zoning should be designed to accommodate Saturday hours without having large areas of unoccupied space being heated and cooled.
M17	A-FILE ROOM, HUB Room, Secure File Room Provide and Install (1) A-File Transaction Window. The design will be based on placement of window and design criteria (inclusive of millwork if required) set at time of design intent planning. Plumbing lines shall not be located above this room or within the walls defining this room.
M18	ASC Biometric/I-90 Stations Paint all walls off-white.
M19	LACTATION ROOM Provide and install plastic laminate counter, 4" backsplash, single basin lavatory, soap dispenser, and paper towel dispenser. Hot water temperature should be set at 105º F, if practical.

Security

TYPE	DESCRIPTION
S1	ESS VIDEO SURVEILLANCE (IPVSS) High resolution colored fixed position video surveillance cameras are to be provided and installed in the waiting room. The quantity and location of the cameras will depend on the building/room configuration and must provide 100% coverage of waiting room, information counter areas, lobby, and security screening areas, all USCIS entrances into corridors and/or circulation spaces, and the building exterior. Camera locations are to be coordinated with all other design elements that are including in the waiting room design. All devices are required to be connected to the central video surveillance equipment located in the LAN/Computer Room.
S2	SECURITY SCREENING/WEATHER VESTIBULE Provide and install a visual alarm for the local duress notification system at the guard desk. The location will be determined at the design phase. Provide and install an additional duress alarm at the guard desk that will notify the Mega Center. Provide and install a monitor for the camera system at the guard desk as well an additional monitor for the ACS system. In larger offices, future growth may require additional magnetometer(s) and X-Ray(s) and space should be designed to include this consideration. Any doors located within this area should be equipped with compliant devices connected to the ACS central system.
S3	ESS GENERAL All ESS equipment required to be located in the LAN/Computer Room and Remote Wiring Closet if applicable must be installed in their own rack and/or cabinet provided by vendor. The electrical power requirements to support the ESS systems will be determined during the design phase. Refer to USCIS Structured Cable Plant Standards and Computer & Telephone Room Standards.
S4	INFORMATION COUNTERS and DIRECTOR'S PRIVATE OFFICE Provide and install a hard wired concealed silent duress alarm that will notify the guard station located in the lobby area.
S5	OPEN OFFICE/CIRCULATION AREA Provide and install at each employee entrance a keypad to arm and disarm the Intrusion Detection System (IDS).
S6	LAN/COMPUTER ROOM A dual technology ultrasonic sensor will be required to be installed and tied into the Intrusion Detection System.
S7	Install an audio/visual AiPhone system for this room capable of ringing from a non-secure (exterior or non-USCIS) space to multiple USCIS AiPhone monitors. Exact location and quantity to be determined during design.
S8	The EPO button must be tied into the security system and alarmed with audio/visual equipment. This alarm activation shall notify directly to the Mega Center and guard desk. Refer to USCIS Field Security Specific Requirements.

Walls

TYPE	DESCRIPTION
W1	TYPICAL OFFICE SPACES Gypsum Wall Board (GWB) constructed slab to 6" above the ceiling with 3.5" acoustical insulation, painted with a low VOC water-based eggshell finish from slab to finished ceiling. Provide 4" vinyl or rubber base.
W2	COPIER/STORAGE/OPEN CIRCULATION AREAS GWB constructed slab to 6" above finished ceiling, painted with a low VOC water-based eggshell finish from slab to finished ceiling. Provide 4" vinyl or rubber base.
W3	IT STAGING/A-FILE & FILE STAGING AREAS/STORAGE/NATZ PREP GWB constructed slab to deck, painted with a low VOC water-based eggshell finish from slab to finished ceiling. Provide 4" vinyl or rubber base.
W4	WAITING ROOM GWB constructed slab to deck with 3.5" acoustical insulation, painted with a low VOC water-based eggshell finish from slab to finished ceiling with sound control at any penetration in partition (such as openings for plenum returns). Accent walls/wainscot may be used at high traffic areas. Provide 4" vinyl or rubber base.
W5	HSDN/TALON ROOM Wall constructed to achieve an STC-55 (ASTC-52) rating constructed slab to deck, painted with a low VOC water-based eggshell finish from slab to finished ceiling. Provide 4" vinyl or rubber base. Lessor to coordinate one acoustical test during construction (acoustical engineer to provide any necessary recommendations) and one acoustical test after construction to verify STC-55 (ASTC-52) to meet ASTM-E336-17A testing standards with typical field allowances.
W6	COMPUTER AND REMOTE WIRING ROOMS GWB constructed slab to deck with 3.5" acoustical insulation, vapor barrier and painted with low VOC water-based eggshell finish from slab to finished ceiling. Provide ¾" fire rated plywood (painted) 2' AFF to finished ceiling on back and side walls for equipment mounting. Provide 4" vinyl or rubber base.

W7	EMPLOYEE AND PUBLIC RESTROOMS Moisture resistant GWB constructed slab to 6" above finished ceiling with 3.5" acoustical insulation, painted with low VOC waterbased eggshell finish slab to finish ceiling with ceramic tile wainscot to 5'-0" AFF at wet walls only. Matching ceramic tile cove base for the entire room.
W8	MAILROOM GWB constructed slab to deck, painted with a low VOC water-based eggshell finish from slab to finished ceiling. Provide 4" vinyl or rubber base. Provide stainless steel or high impact vinyl corner guards and wall protection at least 48" AFF.

Attachments:

- USCIS Computer and Telephone Room Standards – March 2018 – 8 pages
- USCIS Computer and Telephone Room Standards – Appendix A – March 2018 – 4 pages
- USCIS Interior Signage Standards – October 2, 2019 – 21 pages
- USCIS Audiovisual Standards – 1 April 2019 – 28 pages
- USCIS Facility Security Specific Requirement – November 2017 – 20 pages
- USCIS Structured Cable Plant Standard – March 2021 – 72 pages

U.S. Citizenship and Immigration Services

Computer and Telephone Room Standards

March 2018

Office of Information Technology

in collaboration with

Office of Facilities and Space Management Branch

LESSO(b) (6) [redacted] VERNMENT: (b) (6) [redacted]

1.0 INTRODUCTION

1.1 Purpose

The United States Citizenship and Immigration Services (USCIS) Office of Facilities and Space Management Branch have prepared this document with the specific purpose of setting standards for Computer and Telephone Rooms and Equipment. This document will be used to provide the following:

• Facilitate the planning and installation of Computer and Telephone Rooms and Equipment.

• To ensure uniformity of Computer/Telephone Rooms and Equipment in all USCIS facilities.

The primary focus of this document is to define the standards for space, materials, infrastructure, design and installation for USCIS facilities. For questions or comments regarding this document, contact the USCIS Field Support Center Chief, Facilities and Space Management branch Chief at (802) 872-4114.

1.2 Background

United States Citizenship and Immigration Services (USCIS) is a component of the U.S. Department of Homeland Security (DHS). The mission USCIS is to secure America's promise as a nation of immigrants by providing accurate and useful information to our customers, granting immigration and citizenship benefits, promoting an awareness and understanding of citizenship, and ensuring the integrity of our immigration system. Because of increasing demands on Service resources, USCIS personnel must be able to share information rapidly and efficiently in order to succeed in fulfilling the Service mission.

1.3 Scope

1.3.1 Documentation

This document is intended to address the following responsibilities and specifications for all USCIS Computer and Telephone Rooms and Equipment:

- Movement of Equipment.
- Installation of Cabling.
- Distribution of Telephones.
- Size of Rooms.
- Finishes for Rooms.
- Utilities for Rooms.
- Physical Security Requirements.

2.0 GENERAL NOTES:

2.1 Disconnect and Movement of Equipment

Disconnection of the IT equipment should be by the USCIS IT staff. The funding to accomplish this will be provided through the project RWA. Movement of any existing USCIS computer room equipment will be coordinated by End User Support Division. The CIS contact for IT related issues is:

Office of Information Technology
Chief –Converged Services Implementation Branch (CSI)
Converged Services Implementation
70 Kimball Ave., South Burlington, Vermont 05403
(802) 872-9500

2.2 Cable Installation

Cable maintenance and installation will be installed in accordance with the USCIS Structured Cable Plant Standard.

All USCIS facilities will contain 2 CAT 6 cables per drop as per the USCIS Cable Plant Standard.

2.3 Authority to have Telephones

The Director of the field office will decide which workstations will receive telephones. This coordination will occur when the USCIS Telecommunications project manager develops the scope of work with the field office.

2.4 Shared Computer and Telephone Rooms

USCIS and other DHS entities will have separate phone switches and servers although they will be allowed to collocate within a shared Computer/Telephone Room at collocated DHS sites where applicable.

2.5 Fire Suppression System

Standard fire suppression systems shall be installed for computer rooms located in buildings that are required to have sprinkler systems by code. High temperature sprinkler heads within the computer room shall be on their own zone and not daisy chained to other heads in the system. Additionally, type ABC fire extinguishers will be required adjacent to each door entering this room and mounted on a support bracket accordingly. Extinguishers shall be non-corrosive such as Ansul Clean Guard with Dupont FE-36 or equal.

2.6 Decommissioning and Disposal of IT Equipment

The USCIS Enterprise Infrastructure Engineering and Implementation group will be responsible for the decommissioning of any reusable IT equipment. Non-reusable equipment disposal will be the responsibility of the local office asset management group.

2.7 Physical Security LAN room requirements

A space will be provided in the computer room for 1 four post cabinet(s) and 8 feet of wall space to mount associated physical security equipment and electrical outlet requirements. Painted fire rated plywood backboard is provided in telecommunication rooms to mount hardware.

3.0 COMPUTER/TELEPHONE ROOM

The Computer/Telephone Room size shall be determined by the total number of cable drops in the servicing area of the USCIS building space. Please refer to the chart below for required minimum square footage. Rooms should be open space and free from architectural structures, i.e. columns, posts, utilities, exterior windows, roof hatchways etc.

Facility Size	Authorized Staff	Computer Room size
Small	Up to 25	275 sq ft
Medium	25 to 75	325 sq ft
Large	75 to 200	350 sq ft
Unique	**	**
** = Please see OIT representative for specifications.		

- Ladder rack to be installed in computer room in accordance with USCIS Structured Cable Plant Standard.
- The telephone server, physical security, CATV, horizontal and vertical cable plant terminations, data infrastructure, and USCIS extended DEMARC are located in the room.
- Lighting for this room shall be direct/indirect lighting with 50 foot candles at 3'-0" above finished floor.
- A minimum 4 ft clearance behind and 3ft in front of two-post/stand-alone racks.
- A minimum 3 ft clearance behind and 3 ft in front of four-post racks and enclosures.
- There will be two wall mount phones, mounted at 54" AFF, one near the door and one on the opposite wall.
- The room will have one additional cable drop located around the perimeter of the room.
- Above every four-post rack, will be mounted a minimum of one 12 port zero U patch panel which ties in to the main cable plant in the two-post racks. (see cable plant standards)

3.1 Electrical

- Independent electrical panels shall be located in this room to control all power and lighting in this room. The power panel servicing this room shall provide an additional a minimum of 20% spare capacity for future growth.

- Mounting of monitoring/control hardware must be coordinated with an OIT representative.
- Audible and visual alarms located outside this room are required for heat, moisture and smoke sensors inside the room. The heat and moisture device dialer will be on separate analog POTS line provided and maintained by the Lessor separate from the building fire alarm system and will need to notify an employee designated by the Director of the office. If a raised computer floor is used, detectors must be installed above/below the floor.
- All electrical outlets in the Computer/Telephone Room that are to be used for computer equipment only shall be dedicated. Six duplex outlets will be provided for every 150 sq ft (at least one on each wall of the room). If a raised floor is utilized these outlets will be located on 10 foot flexible conduit "whips" under the raised floor.
- Two L14-30R single phase outlets are to be installed above each rack in the room. Outlets are to be located a minimum of 8 ft above finished floor.
- Dedicated outlets, L6-30R, L5-30R, 5-20R, etc. need to be installed for security system, please refer to security specification and OIT for direction.
- Convenience quadplex outlet shall be installed on the walls per NEC standard.
- A separate ground bus bar will be located in this room, behind the data rack. All electrical components in this room, will ground at this location, with # 6 copper ground. This Bus bar will be the TMGB and connected to the main building electrical service. A secondary ground connection will be required to building steel.
- An EPO, emergency "KILL" switch with cover or safety ring is required adjacent to all doors exiting this room. This system shall be designed to shut down all computer equipment power to this room. The UPS units installed by USCIS shall be wired to the EPO following IT deployments, by the lessor's electrician.
- Electrical Panels will be flush mounted with the wall, surface panels and /or framing out of wall will not be permitted.
- Telecommunications switch rooms, wire closets, and related spaces shall meet applicable Telecommunications Industry Association (TIA) and Electronic Industries Alliance (EIA) standards. These standards include the following:

  a. TIA/EIA-568, Commercial Building Telecommunications Cabling Standard,

  b. TIA/EIA 569, Commercial Building Standard for Telecommunications Pathways and Spaces,

  c. TIA/EIA-570, Residential and Light Commercial Telecommunications Wiring Standard,

  d. TIA/EIA-607, Commercial Building Grounding and Bonding Requirements for Telecommunications Standard

3.2 HVAC

- A separate stand alone HVAC unit, capable of providing temperatures of between 65 degrees F and 70 degrees F, and a humidity level of between 40% and 50% 24 hours a day seven days a week. If an above ceiling unit is utilized, it shall be located entirely outside the computer room and ducted in unless it is determined that a raised computer room floor will be used. Floor and wall-mount CRAC units within the Computer Room and TR's are acceptable and location will be provided by OIT in the Visio layouts

provided to accommodate space required. Under-floor ducting will be required if a raised floor application is utilized. USCIS data engineers will provide a max. BTU count for the original install. Overall cooling requirements will need to be determined by a certified HVAC engineer.

- Mounting of monitoring/control hardware must be coordinated with OIT representative.

- Audible and visual alarms located outside this room are required for heat, moisture and smoke sensors inside the room. The heat and moisture device dialer will be on separate analog POTS line provided and maintained by the lessor separate from the building fire alarm system and will need to notify an employee designated by the Director of the office. If a raised computer floor is used, detectors must be installed above/below the floor.

4.0 COMPUTER STAGING ROOM

The minimum size of the Computer Staging Room shall be 150 square feet.

There will be a work surface area running the length of the longest wall in the room for staging/ repair of OIT equipment. The height of this work surface is not to exceed 36" AFF.

There will be 6 standard cable drops provided in this room. (Please refer to CD's for drop location.)

- If applicable, a 4 ft X 3ft tempered glass window shall be installed between the computer room and computer room staging area.

4.1 HVAC

- Building standard HVAC will be required for this room.

4.2 Electrical

- Lighting for this room shall be direct/indirect lighting with 50 foot candles at 3'-0" above finished floor.
- Three dedicated 5-20R quad outlets shall be installed above the required work surface. (Typically 42" AFF).
- Standard convenience outlets will also be provided.

5.0 TERMINATION ROOMS (TR) / WIRE CLOSETS

The Termination Room size shall be determined by the total number of cable drops in the servicing area of the USCIS building space. Please refer to the chart below for required minimum square footage. These rooms will only be required if the total cable runs between desktop computers and the Computer Room exceeds 328 feet (100 meters) and/or spans multiple floors. Rooms should be open space and free from architectural structures, i.e. columns, posts, utilities, roof hatchways etc.

Facility Size		Authorized Staff		TR size
Small		Up to 25		75 sq ft
Medium		25 to 75		100 sq ft
Large		75 to 200		225 sq ft
Unique		**		**
** = Please see OIT representative for specifications.				

5.1 HVAC

- A separate standalone HVAC unit, capable of providing temperatures of between 65 degrees F and 70 degrees F, and a humidity level of between 40% and 50% 24 hours a day seven days a week. If an above ceiling unit is utilized, it shall be located entirely outside the computer room and ducted in unless it is determined that a raised computer room floor will be used. Floor and wall-mount CRAC units within the Computer Room and TR's are acceptable and location will be provided by OIT in the Visio layouts provided to accommodate space required. Under-floor ducting will be required if a raised floor application is utilized. USCIS data engineers will provide a max. BTU count for the original install. Overall cooling requirements will need to be determined by a certified HVAC engineer.

- Mounting of monitoring/control hardware must be coordinated with OIT representative.
- Audible and visual alarms located outside this room are required for heat, moisture and smoke sensors inside the room. The heat and moisture device dialer will be on separate analog POTS line provided and maintained by the lessor separate from the building fire alarm system and will need to notify an employee designated by the Director of the office. If a raised computer floor is used, detectors must be installed above/below the floor.

5.2 **Electrical**

- The lighting level shall be 50 foot candles at 3'-0" above finished floor. This lighting will also be on its own emergency backup power source

- Two L14-30R outlets are to be installed above each rack in the room. Outlets are to be located a minimum of 8 ft. AFF.
- Dedicated 120v, 20 amp outlets shall be provided at 6'-0" on center around the room and 18" AFF. Outlets shall have certified electrical ground compliant with ANSI/TIA/EIA 607.
- A separate ground bus bar will be located in this room, behind the data rack. All electrical components in this room, will ground at this location, with # 6 copper ground. Bus bar will terminate to TMGB in the computer room and secondary ground to building steel.

5.3 Uninterrupted Power Supply System
(Determined by USCIS OIT representative)

- In the advent that a whole room UPS is deemed necessary by OIT, details will be provided.

U.S. Citizenship and Immigration Services

Computer and Telephone Room Standards

Appendix A

March 2018

Office of Information Technology

In collaboration with

Office of Facilities and Space Management

1.0 INTRODUCTION

1.1 Purpose

The Citizenship and Immigration Services (USCIS) FSC Office of Facilities and Space Management have prepared this document with the specific purpose of setting standards for Computer and Telephone Rooms and Equipment. This document will be used to provide the following:

• Facilitate the planning and installation of Computer and Telephone Rooms and Equipment.

• To ensure uniformity of Computer/Telephone Rooms and Equipment in all Non-USCIS facilities.

The primary focus of this document is to define the standards for space, materials, infrastructure, design and installation for USCIS facilities at contracted or non USCIS sites. For questions or comments regarding this document, contact the USCIS OIT Enterprise infrastructure Chief, at (802) 872-9500.

2.0 FACILITY REQUIREMENTS

2.1 Walls

- GWB constructed slab to deck with 3.5" acoustical insulation, vapor barrier and painted with low VOC water-based eggshell finish from slab to finished ceiling. Provide ¾" fire rated plywood (painted) 2' AFF to finished ceiling on back and side walls for equipment mounting. Provide 4" vinyl or rubber base.

2.2 Ceiling

- Minimum ceiling height 8'-6". Acoustical Ceiling Tile (ACT) with tegular edges with a minimum 25% recycled content. Space above the ceiling must be free from sprinkler mains, plumbing runs, building HVAC ductwork, condensate drains and HVAC equipment. The adjacent wall must also be free from adjoining plumbing or water pipelines. Restrooms, kitchens, or other similar space shall not be located directly over the LAN/Computer Room.

2.3 Floor

- Grounded, static dissipative Vinyl Composition Tile (VCT), or rubber flooring.

2.4 Doors, Windows and Hardware

- SC hardwood veneer door with commercial-grade mortise hardware (storeroom function lockset) with a high-security replaceable core, door closer, and 2" HM frame with welded corners. Provide ESS Access Control System in accordance with USCIS Facility Security Specific Requirements. Devices shall be connected to the ACS's central system. Components are to include contact/contactless card reader, door position switch, a request to exit device and electric strike.

- If applicable, a 4 ft X 3ft tempered glass window will be installed between the computer room and computer room staging area.

3.0 MISCELANEOUS ITEMS

3.1 Emergency Generator and Back up Power Supply

(Determined by the government)

- This equipment shall provide the computer room identified above with electrical power in the event of an electrical service interruption. The system shall include an enclosed concrete vault or pad, transfer switch and automatic time for weekly start-up and transfer of load. When available, the generator shall utilize natural gas when service is available. If the area in not served by a natural gas company, the system shall also include a fuel tank and the Lessor will be responsible for the cost of refueling the tank on a regular basis. The Lessor is also responsible for maintenance to insure the generator is in operational condition at all times.
- Equipment in this room will be powered through USCIS provided plug in surge protection battery backup units unless it is determined by USCIS that a stand-alone UPS system and/or an emergency generator are required (dependent upon amount of equipment). If required, stand-alone UPS (30 minute capacity)
- If an emergency generator has been provided; UPS & emergency generator will need to accommodate all electrical outlets in this room. The lighting will only require the emergency generator. Both UPS and emergency generator must be located in a private room with its own dedicated HVAC that is separate from the computer room. HVAC for the UPS/Emergency Generator Room should provide cooling 24 hours a day 7 days a week

U.S. Citizenship and Immigration Services

Interior Signage Standards

Prepared by USCIS Facilities Management Division
October 2, 2019 Version

Interior Signage Standards

U.S. Citizenship and Immigration Services

SCOPE

All U.S. Citizenship and Immigration Services (USCIS) facilities require extensive signage to provide wayfinding and information. Signage should have a standardized appearance to provide consistent branding with other USCIS offices. Room signage, directional signage, and informational signage are all required.

Estimate – The contractor shall provide an estimated cost for interior signage based on this scope of work and the floor plan of the specific building. This bid shall show a quantity of each type of sign in this SOW. A unit cost for each type of sign including installation cost shall be provided to allow for a determination based on best value to the government.

Development of an Interior Signage Program - The successful contractor shall be required to participate in conference calls and/or meetings with USCIS to gather signage requirements of USCIS. Based on USCIS input the contractor will be responsible to prepare an interior signage program identifying each sign's size, content, mounting instructions/method and placement within the USCIS space. The placement for each sign must be clearly indicated on the contractor's developed floor plan. A draft program shall be submitted for review and comment by USCIS followed by subsequent conference calls and/or meetings to finalize the interior signage program.

Manufacture and Installation – The contractor shall manufacture and install the signage in accordance with the interior sign program. Installation must be coordinated with the general contractor to ensure the required life safety signs are installed prior to the required municipal inspections.

Software | Template | Paper Stock – The contractor shall provide a template and printing instruction to allow USCIS to change inserts on the signs. This template shall be in a Microsoft Office suite such as Word or Excel.

The contractor shall provide one ream of matching letter size paper stock per one-hundred (100) Office/Workstation Signs (rounded up to the nearest 100). The contract shall provide paper stock information used for the signs allowing USCIS to procure the paper directly from a supplier.

Digital Images - Contact USCIS Project Manager to obtain digital images for seals, logos, etc.

Ordering Instructions / Form – The contractor shall provide ordering instructions for the local office to utilize when additional signage is required after occupancy.

Interior Signage Standards

U.S. Citizenship and Immigration Services

STANDARD SIGNS

Signs must have a consistent appearance in style, color and sizes. All signs shall be equipped with end caps (corners can be square, round or beveled). All clear windows lens inserts must allow for ease of changing room, office and staff names and titles by the building occupants. Sizes indicated are approximate to allow for subtle differences in sign manufacturers.

Unless noted otherwise, fonts shall be as follows:

- Room numbers (typically the top line of signs) – Franklin Gothic Book
- Room names and titles – Franklin Gothic Book
- Employee names – Joanna MT

Signs shall utilize DHS branding colors as follows (use sign manufacturers standard color closest to pantone indicated below):

Color	Pantone	C	M	Y	K
DHS Blue	2955 C	100	45	0	37
DHS Light Grey	Cool Gray 2 C	19	15	16	0
DHS Grey*	Cool Grey 6 C	0	0	0	20
DHS Dark Grey	Cool Grey 11 C	60	51	51	20
DHS Red	187 C	0	100	79	20
DHS Green	370 C	56	0	100	27
Black	Black	0	0	0	100
White	White	0	0	0	0

*USED ON DHS SEAL ONLY (SIGNS USE DHS LIGHT AND DHS DHS DARK GREY)

Required signs will be depend on the type of office. Standard Sign types noted in superscript [12] and/or [3] are required for specific types of USCIS offices are indicated below:

- Signs denoted with a [1] are only required at Field and District Offices
- Signs denoted with a [2] are only required at Asylum Offices
- Signs denoted with a [3] are only required upon request of the USCIS Project Manager.

Clear space must be maintained on all signs around the perimeter of the DHS Seal and text "U.S. Citizenship and Immigration Services". The clear space shall match that of the letter "I" in Immigration.

STANDARD SIGNS (continued)

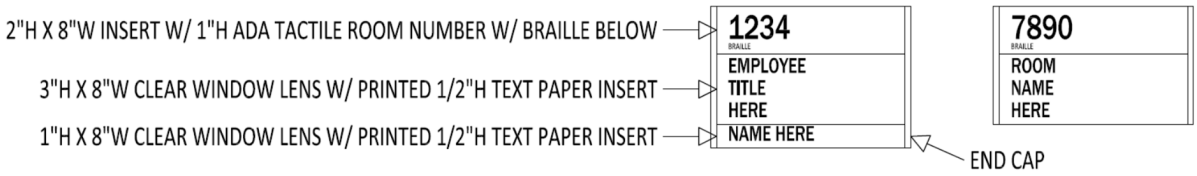
ROOM AND OFFICE/WORKSTATION SIGNS shall all be at a consistent width of 8"W. Every room and workstation will receive a sign. If a room is accessed from multiple remote doors a sign shall be provided at each door. Below is a summary of the requirements for all other lines of text:

Office/Workstation Signs shall be configured as follows:

- 2"H DHS Blue top insert with DHS Light Grey 1"H room number tactile with braille below.
- 3"H clear window middle insert with interchangeable DHS Light Grey paper insert with black ½"H laser printed text indicating the employee's title.
- 1"H clear window bottom insert with interchangeable DHS Light Grey paper insert with black ½"H laser printed text indicating the employee's name.
- DHS Blue end caps.

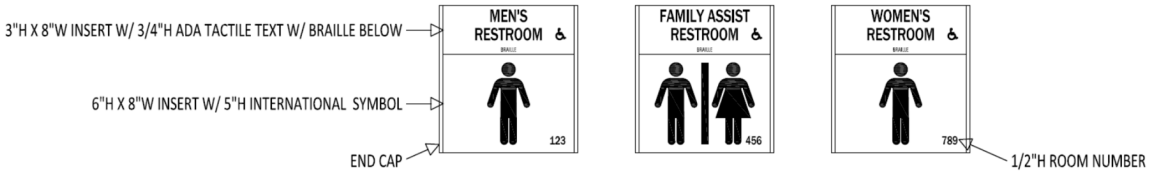
Room Signs shall be configured as follows:

- 2"H DHS Blue top insert with DHS Light Grey 1"H room number tactile with braille below.
- 3"H clear window lower insert with interchangeable DHS Light Grey paper insert with black ½" laser printed text indicating the room name.
- DHS Blue end caps.



RESTROOM SIGNS shall be approximately 8"W x 9"H include the room name in ¾"H text above braille followed by the international symbol and room number. These signs shall be configured as follows:

- 3"H DHS Blue top insert with DHS Light Grey ¾"H tactile text with braille below.
- 6"H DHS Light Grey lower insert with 5"H black international symbol and ½"H room number in lower right corner.
- DHS Blue end caps.
- *note: all public restrooms shall also be equipped with an 8"H x 8"W DHS Light Grey sign with $^{5}/_{8}$"H black text and corresponding international symbol indicating baby changing station are located in the restroom.*



- Each restroom partition door will receive one 8"W x 12"H sign consisting of bold, capitalized text, "PLEASE DO NOT THROW PAPER TOWELS, TRASH, OR FEMININE HYGIENCE PRODUCTS IN THE TOILET." When a second language is required, the translation shall be included below.

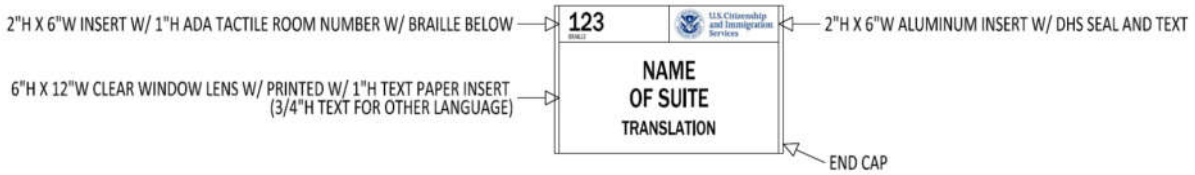
Interior Signage Standards

U.S. Citizenship and Immigration Services

STANDARD SIGNS (continued)

OFFICE SUITE SIGNS shall be approximately 8”H x 12” and are used for primary doors entering office suites and also for doors entering waiting rooms and naturalization ceremony rooms. For signs entering waiting rooms and ceremony rooms a second language may be required. These office suite signs shall be configured as follows:

- 2”H x 6”W DHS Blue top left insert with DHS Light Grey 1”H room number tactile with braille below.
- 2”H x 6”W right top line aluminum insert with DHS Seal and “U.S. Citizenship and Immigration Services” to fit.
- 6”H x 12”W clear window lower insert with interchangeable DHS Light Grey paper insert with black 1”H laser printed text indicating the suite name. Doors entering the waiting room(s) and naturalization ceremony room would also have the alternative language for the room in black ¾”H laser printed text.
- DHS Blue end caps.



WAYFINDING / DIRECTIONAL SIGNAGE is used to assist in navigation within the building. In areas where the public has access (such as lobbies, waiting rooms and corridors where public interviews occur) signs shall include a second language* and provide guidance to exits, restrooms, waiting areas and ceremony rooms. In other office areas these signs shall provide guidance to exits, restrooms, office suites, break rooms and large conference rooms. The signs should be strategically placed in lobbies and corridors to provide clear direction for employees and the public.

**second language to be determined by USCIS*

Smaller Overhead Signs shall be used when ceiling heights in the room are 9’ or less and be configured as follows:

- 4”H x 4”W dark green insert with DHS Light Grey 3”H direction arrow on the left for “street signs” for corridors.
- 4”H x 14”W dark green insert with DHS Light Grey 1”H English uppercase text on right for “street signs”[3] for corridors. Note: no translation is required for street signs.
- 4”H x 4”W DHS Blue insert with DHS Light Grey 3”H directional arrow on the left.
- 4”H x 14”W DHS Light Grey insert with black 1”H English text and second language below in ¾”H text.
- DHS Blue end caps.
- Add additional tiers as necessary to identify other rooms/areas.

STANDARD SIGNS (continued)

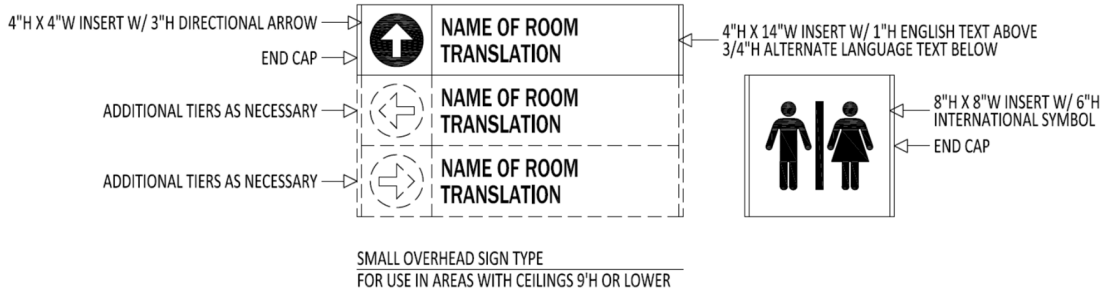
WAYFINDING / DIRECTIONAL SIGNAGE (continued)

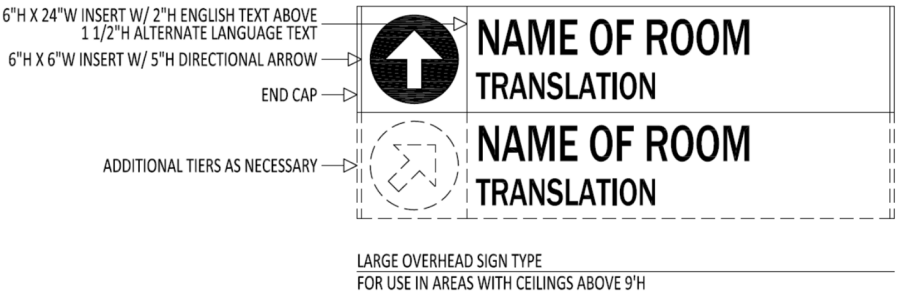
Larger Overhead Signs shall be used when ceiling heights in the room are 9’ or higher and be configured as follows:

- 6”H x 6”W DHS Blue insert with DHS Light Grey 5”H directional arrow on the left.
- 6”H x 24”W grey insert with black 2”H English text and second languages below in 1 1/2” text.
- DHS Blue end caps.
- Add additional tiers as necessary to identify other rooms/areas.

Restroom Location Overhead Signs shall be used place perpendicular to the doors entering the restrooms and be DHS Light Grey 8”H x 8”W with black international symbol and DHS Blue end caps.

Restricted Area Signage are required on any door entering office areas and corridors accessing the back USCIS office space from lobbies, waiting rooms and the ceremony room. They shall also be required at doors to any file rooms, secure file rooms, TALON rooms or IT Server Rooms. These are approximately 6”H x 6”W DHS Red signs with 3½”H DHS Light Grey international symbol ½”H text reading “Authorized Personnel Only” with DHS Red end caps shall be mounted directly to the door.





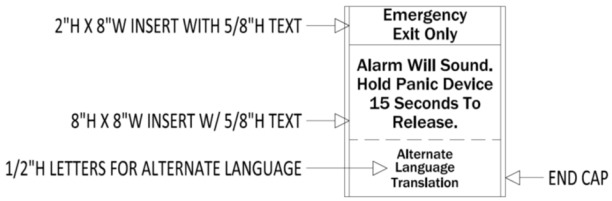
LIFE SAFETY SIGNS are used to provide information concerning safe egress and use of the space. The contractor must review the life safety plan (from the approved construction drawings) in detail to ensure all necessary signage is included.

STANDARD SIGNS (continued)

WAYFINDING / DIRECTIONAL SIGNAGE (continued)

Exit Signs shall be located at all emergency exits per the life safety plan. They shall be approximately 2"H x 8"W and include braille below the ¾"H DHS Light Grey tactile text "EXIT". In cases where the exit sign is located at a numbered stairwell a lower insert will be required. This lower DHS Light Grey 2"H x 8"W insert shall have 5/8" black text and indicate the stair number (i.e. Stair 3). The sign shall be equipped with DHS Blue end caps.

Special Exit Signs – Some emergency exits may be alarmed or may be equipped with delayed release. In these circumstances a sign must be provided. The sign must be multi-lingual if located in the lobby, waiting rooms and corridors where public interviews occur. They must warn that the door is alarmed and instructions if the door has a delayed release feature. These signs shall be approximately 10"H x 8"W and be mounted directly to the door above the panic device. The top 2"H insert should be DHS Red with DHS Light Grey 5/8"H text. The lower DHS Light Grey insert should be 8"H (may be constructed from more than one insert totaling 8"H) with 5/8"H black English text above ½"H black text for second language.



Evacuation Plan Signs – shall have a DHS Blue 2"H x 12"W top insert labeled "Evacuation Plan" with 1"H DHS Light Grey text over a 13"H x 12"W insert with clear display area to accept a 12"H x 11"D insert and include DHS Blue end caps. The Evacuation Plan map will show the location of the sign and the evacuation route from said location. This plan shall be developed by the sign contractor.

Maximum Occupancy Signs shall be provided in waiting rooms, the ceremony room and other areas with maximum capacities by code. These 12"W x 8"H signs shall be DHS Light Grey with black text and DHS Blue end caps. The contractor shall work with the projects architect to determine the maximum occupancy.

STANDARD SIGNS (continued)

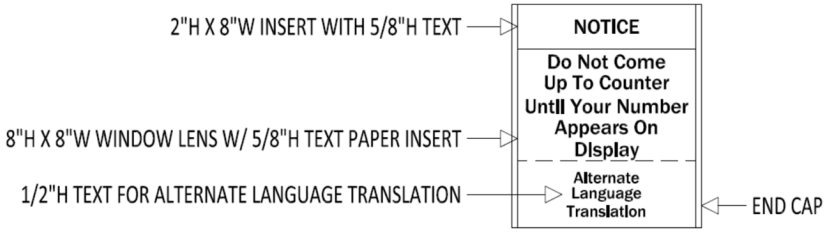
INFORMATION COUNTER SIGNS[12] are required at each information counter station will require a window number sign above (A), a notice sign (B), a USCIS generated sign (E), a freestanding nameplate sign (C) and a freestanding closed sign (D). Refer to mounting locations identified in the MOUNTING REQUIREMENTS section of this document.

Window Number Sign[12] (A) is required to be centered above each information counter station. They shall be configured as follows:

- Each window shall have a sequential number.
- Overall size approximately 8”H x 18”W.
- Right DHS Blue insert that is approximately 8”H x 6”W with 3”H sequential numbers in DHS Light Grey text.
- Left DHS Light Grey insert(s) that is approximately 8”H x 12”W with 2”H black text “Window” (with 1½”H black text in second language below when required) – may be one or two inserts to achieve the 8” approximate height).
- End caps shall be DHS Blue.

Notice Sign[12] (B) is required at each information counter station. They shall be configured as follows:

- Overall size approximately 10”H x 8”W.
- Top DHS Blue insert that is approximately 2”H with 5/8”H DHS Light Grey text stating “NOTICE”.
- Lower DHS Light Grey insert that is approximately 8”H with 5/8”H black text stating “Do Not Come Up To Counter Until Your Number Appears On Display” (with ½”H black text in second language below when required) – may be one or two inserts to achieve the 8” approximate height).
- Mount at 48” to bottom of sign.
- End caps shall be DHS Blue.



STANDARD SIGNS (continued)

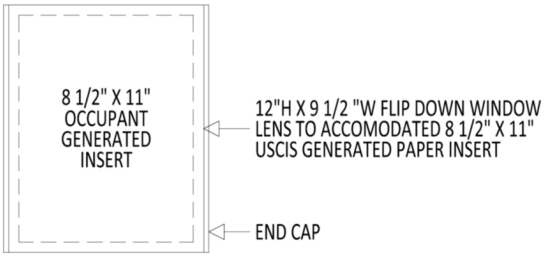
INFORMATION COUNTER SIGNS (continued)

Employee Name Plate Desk Sign[12] (C) shall be freestanding and is required at each information counter station. They shall have an integral rail desk stand. The sign shall have a clear lens with a changeable 2"H x 8"W DHS Light Grey paper insert with ½"H black text with the employee's name.

Closed Desk Sign[12] (D) shall be freestanding and is required at each information counter station. They shall have an integral rail desk stand. The sign shall have a clear lens with a changeable 2"H x 8"W DHS Light Grey paper insert with ½"H bold black text "CLOSED" with the alternative language below (when required).

USCIS Generated Sign[12] (E) is required at each information counter station. They should be configured as follows:

- Overall size approximately 12"H x 9½"W.
- Flip down clear plastic lens with DHS Light Grey border that accommodates an 8 ½" x 11".
- End caps shall be DHS Blue.
- Appropriate backer for glass installations.



WAITING ROOM SIGNS[12] shall provide general information for the public.

Poster Holders[12] shall be provided in each waiting room. Two 24"W x 36"H wall mounted poster holder with hinged clear cover door.

USCIS Contact Sign[12] shall be installed at a visible location within each USCIS waiting room (not required in ASC Waiting Rooms). The sign shall be configured as follows:

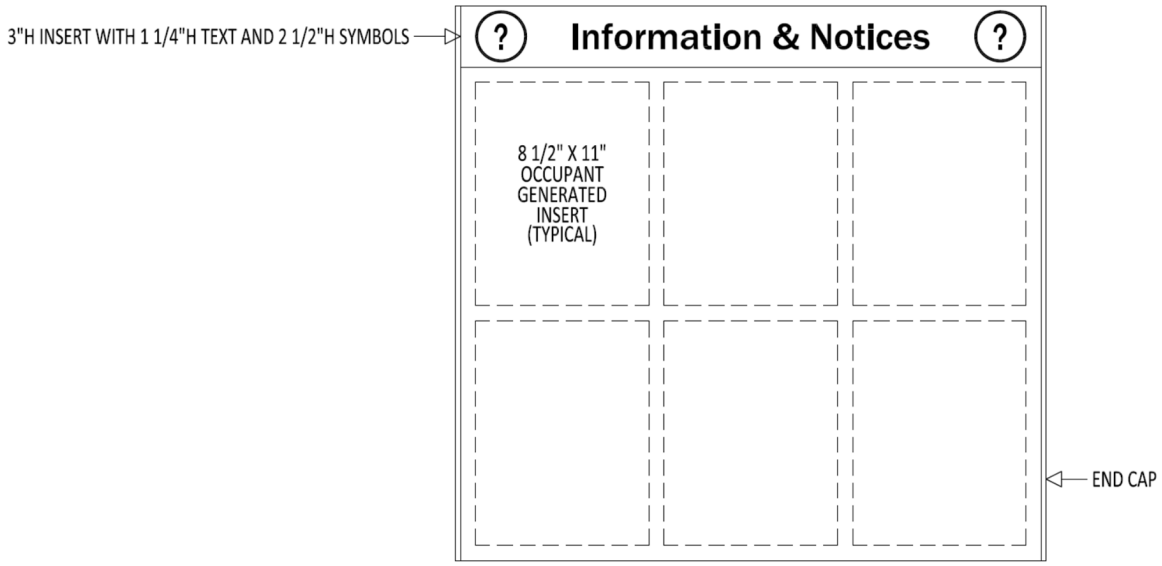
- 3"H x 12"W DHS Blue top insert with DHS Light Grey 1 1/8"H italic text "Did You Know?".
- 15"H x 12"W DHS Light Grey lower insert reading "To Get Answers And Request Forms Call The National Customer Service Center 1-800-375-5283 Or Visit Us Online At uscis.gov" with ¾"H black text except for phone number and website address that shall be in 1"H black text.
- See drawing for USCIS Contact Sign under LOBBY SIGNS.

STANDARD SIGNS (continued)

WAITING ROOM SIGNS (continued)

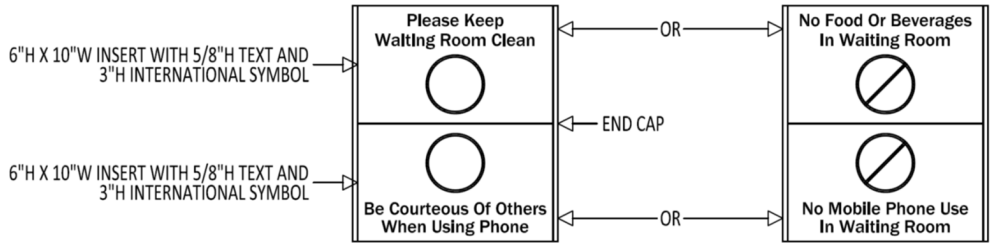
Information & Notices Sign[12] shall be located in each waiting room. This sign shall be configured as follows:

- Top DHS Blue insert that is approximately 3"H with 2½"H "?" DHS Light Grey symbols on the left and right and 1¼"H DHS Light Grey text reading "Information & Notices".
- The lower insert(s) shall be DHS Blue frame with a hinged non-glare clear window covering 6 slots for USCIS generated 8½W x 11"H paper inserts on DHS Light Grey backboard.
- DHS Blue end caps.



Food/Drink and Cell Phone[12] consumption/use may not be permitted in the waiting room(s). One sign shall be posted for each 500 square feet of space. These signs shall be configured as follows:

- Top DHS Light Grey insert that is approximately 6"H x 10"W with 5/8"H black text either stating "Please Keep Waiting Room Clean" or "No Food Or Beverages In Waiting Room" a with the 3"H DHS Light Grey cell phone international symbol below. Option shall be determined by USCIS.
- Lower DHS Light Grey insert that is approximately 6"H x 10"W with 5/8"H black text either stating "Be Courteous Of Others When Using Phone" or "Please Keep Waiting Room Clean" with the 3"H black food/beverage international symbol above. Option shall be determined by USCIS.
- End caps shall be DHS Blue.

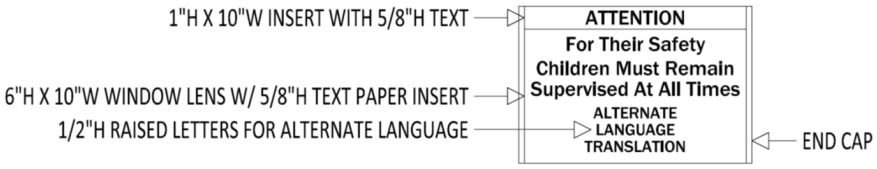


STANDARD SIGNS (continued)

WAITING ROOM SIGNS (continued)

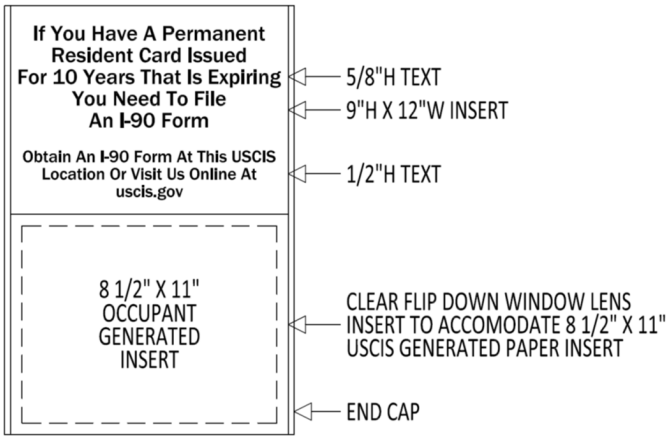
Supervise Children Sign[12] shall be posted for each 500 square feet of space. These signs shall be configured as follows:

- Top DHS Blue insert that is approximately 1"H x 10"W with 5/8"H DHS Light Grey text stating "ATTENTION".
- Lower 6"H x 10"W clear window lower insert with interchangeable DHS Light Grey paper insert with black 5/8"H laser printed text indicating "For Their Safety Children Must Remained Supervised At All Times". When a second language is required the translation shall be included below in ½" black laser printed text.
- End caps shall be DHS Blue.



I-90 Information Sign[1] shall be posted in a visible location in all USCIS waiting rooms (not required in ASC Waiting Room).

- Top DHS Light Grey insert that is approximately 9"H x 12"W with 5/8"H black text "If You Have A Permanent Resident Card Issued For 10 Years That Is Expiring You Need To File An I-90 Form" followed by ½"H grey text "Obtain An I-90 Form At This USCIS Location Or Visit US Online At uscis.gov".
- Lower clear flip down clear window with DHS Light Grey border designed to accommodate an 11"W x 8½H USCIS generated paper insert.
- DHS Blue end caps.

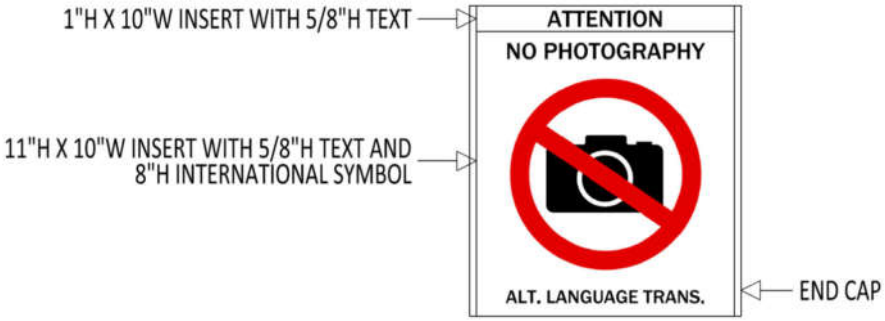


STANDARD SIGNS (continued)

WAITING ROOM SIGNS (continued)

NO PHOTOGRAPHY SIGNS[12] shall be posted for each 500 square feet of waiting room space. These signs shall be configured as follows:

- Top DHS Blue insert that is approximately 1"H x 10"W with 5/8"H DHS Light Grey text stating "ATTENTION".
- Lower 11"H x 10"W clear window lower insert with interchangeable DHS Light Grey paper insert with black 5/8"H laser printed text indicating "NO PHOTOGRAPHY". When a second language is required the translation shall be included below in ½" black laser printed text.
- End caps shall be DHS Blue.



RECEPTION SIGNS[12] include several signs that are required in the vicinity of the reception counter. Please note that there may be more than one reception counter. Signs required in the vicinity of the reception counter(s) include an overhead sign, special accommodations sign and a USCIS Contact Information Sign.

Overhead Reception Sign[12] shall be installed above the reception/check-in station. This sign shall be configured as follows:

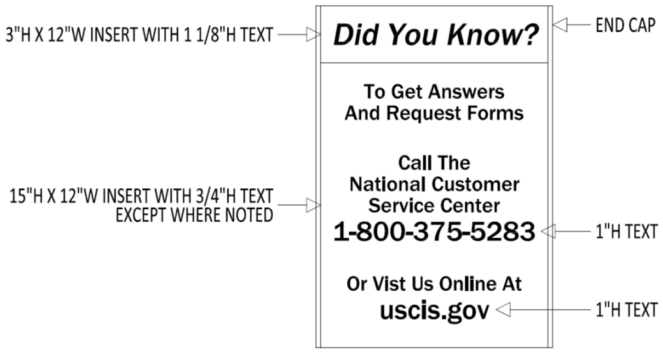
- Aluminum left insert that is approximately 8"H x 6"W with the DHS seal and text "U.S. Citizenship and Immigration Services".
- DHS Blue right insert that is approximately 8"H x 30"W with 2"H DHS Light Grey text "Reception Check-In" with grey 1 3/8" second language translation below.
- DHS Blue end caps.

STANDARD SIGNS (continued)

RECEPTION SIGNS (continued)

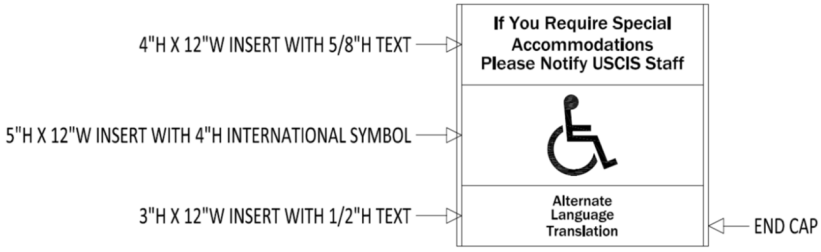
USCIS Contact Sign[12] shall be installed in the vicinity of the reception counter at a visible location. The sign shall be configured as follows:

- 3"H x 12"W DHS Blue top insert with DHS Light Grey 1 1/8"H italic text "Did You Know?".
- 15"H x 12"W DHS Light Grey lower insert reading "To Get Answers And Request Forms Call The National Customer Service Center 1-800-375-5283 Or Visit Us Online At uscis.gov" with ¾"H black text except for phone number and website address that shall be in 1"H black text.



Special Accommodations Sign[12] shall be installed in the vicinity of the reception counter at a visible location. The sign shall be configured as follows:

- 4"H x 12"W DHS Blue top insert with DHS Light Grey 5/8"H text "If You Require Special Accommodations Please Notify USCIS Staff".
- 5"H x 12"W DHS Light Grey middle insert with black 4"H international symbol.
- 3"H x 12"W DHS Blue bottom insert with DHS Light Grey ½"H second language translation.
- DHS Blue end caps.

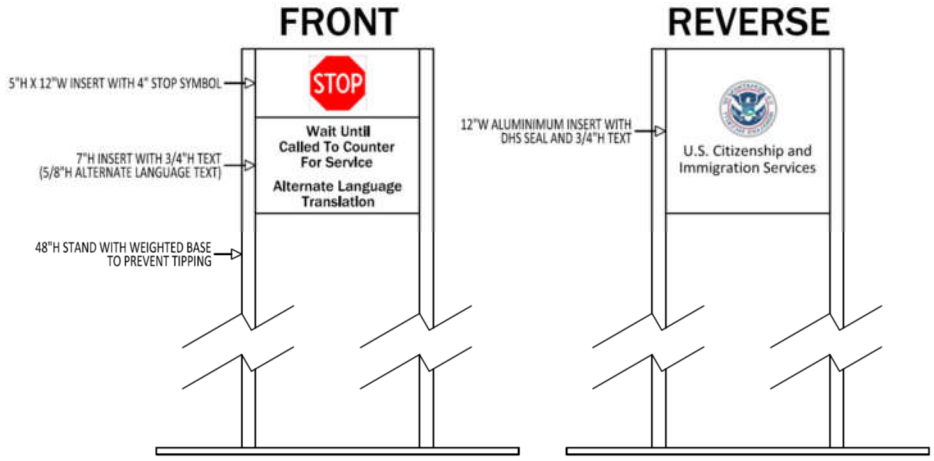


STANDARD SIGNS (continued)

RECEPTION SIGNS (continued)

Stop Sign[12] shall be a freestanding sign that will be placed in front on the reception counter. The sign shall be configured as follows:

- Two sided.
- DHS Blue 48”H stand with weighted base.
- Front side configured as follows:
  - Top DHS Light Grey insert approximately 5”H x 12” insert with 4”H stop symbol
  - Lower DHS Light Grey insert approximately 7”H x 12” insert with ¾”H black text “Wait Until Called To Counter For Service” with 5/8”H black text in second language below. Note may be combined into one insert.
- Reverse side to be aluminum insert approximately 12”H x 12”W with DHS Seal above ¾”H DHS Dark Grey text “U.S. Citizenship and Immigration Services”.



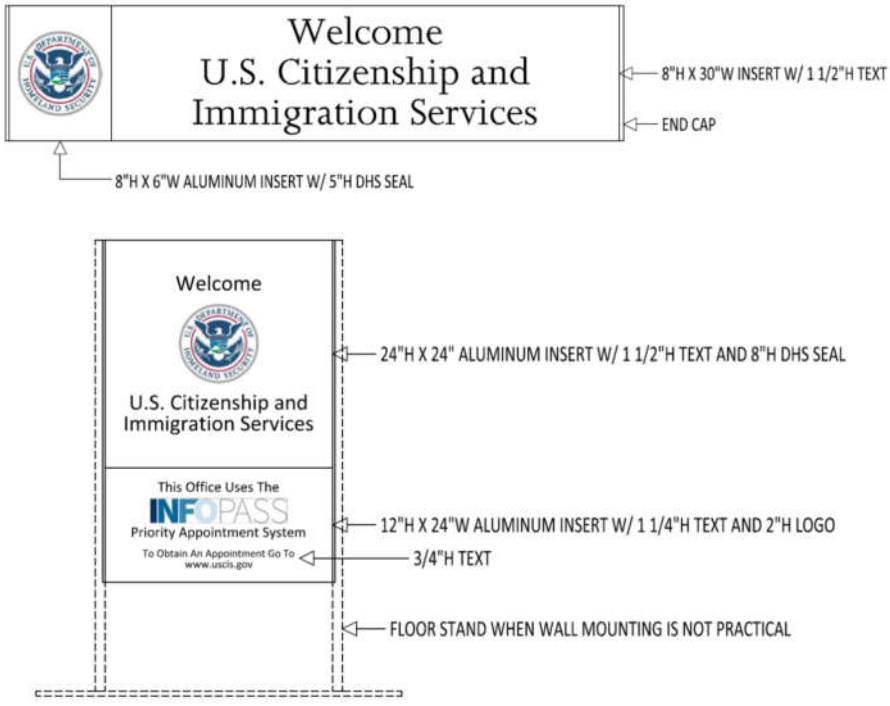
STANDARD SIGNS (continued)

LOBBY SIGNS[12] are used to greet visitors to USCIS Office and provide guidance, instructions, wayfinding, etc.

Welcome Sign[12] must be mounted at a prominent location in the line of sight at the lobby entry. This can be achieved with a wall mounted, floor mounted or overhead sign.

InfoPASS Sign[1] (USCIS appointment scheduling system) must also be mounted at a prominent location in the line of sight at the lobby entry. It may be part of the Welcome Sign or may be an independent sign. It may be wall mounted or part of a floor mounted sign.

- Combined Floor / Wall Mounted Sign configured as follows:
  - 60”H DHS Blue sign (floor) mount stand or DHS Blue end caps (wall).
  - Top aluminum insert approximately 24”H x 24”W insert with 8”H DHS seal and 1½” DHS Dark Grey Joanna MT text “Welcome U.S. Citizenship and Immigration Services”.
  - Lower DHS Light Grey insert approximately 12”H x 24”W insert with 1¼”H black text “This Office Uses The” followed by the InfoPASS logo, 1¼”H black text “Priority Appointment System”, ¾”H black text “To Obtain An Appointment Go To www.uscis.gov”.
- Overhead Sign configured as follows:
  - Left aluminum insert that is approximately 8”H x 6”W with 5”H DHS seal.
  - Right DHS Blue insert that is approximately 8”H x 30”W with 1½”H DHS Light Grey Joanna MT text “Welcome U.S. Citizenship and Immigration Services”.
  - When overhead sign is used for welcome sign, wall mount the InfoPASS sign.

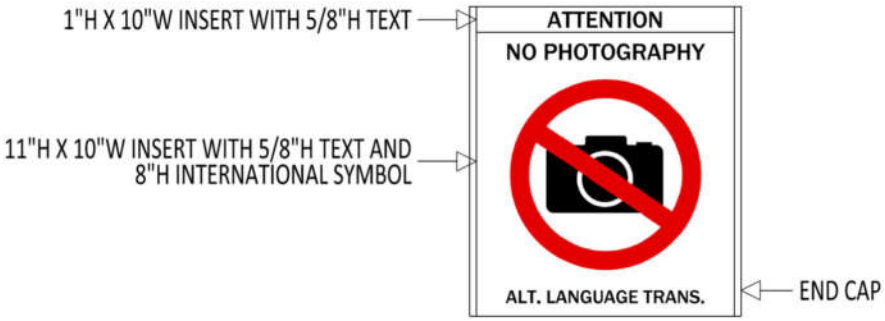


STANDARD SIGNS (continued)

LOBBY SIGNS (CONTINUED)

NO PHOTOGRAPHY SIGNS[12] shall be posted for each 500 square feet of lobby space. These signs shall be configured as follows:

- Top DHS Blue insert that is approximately 1"H x 10"W with 5/8"H DHS Light Grey text stating "ATTENTION".
- Lower 11"H x 10"W clear window lower insert with interchangeable DHS Light Grey paper insert with black 5/8"H laser printed text indicating "NO PHOTOGRAPHY". When a second language is required the translation shall be included below in ½" black laser printed text.
- End caps shall be DHS Blue.



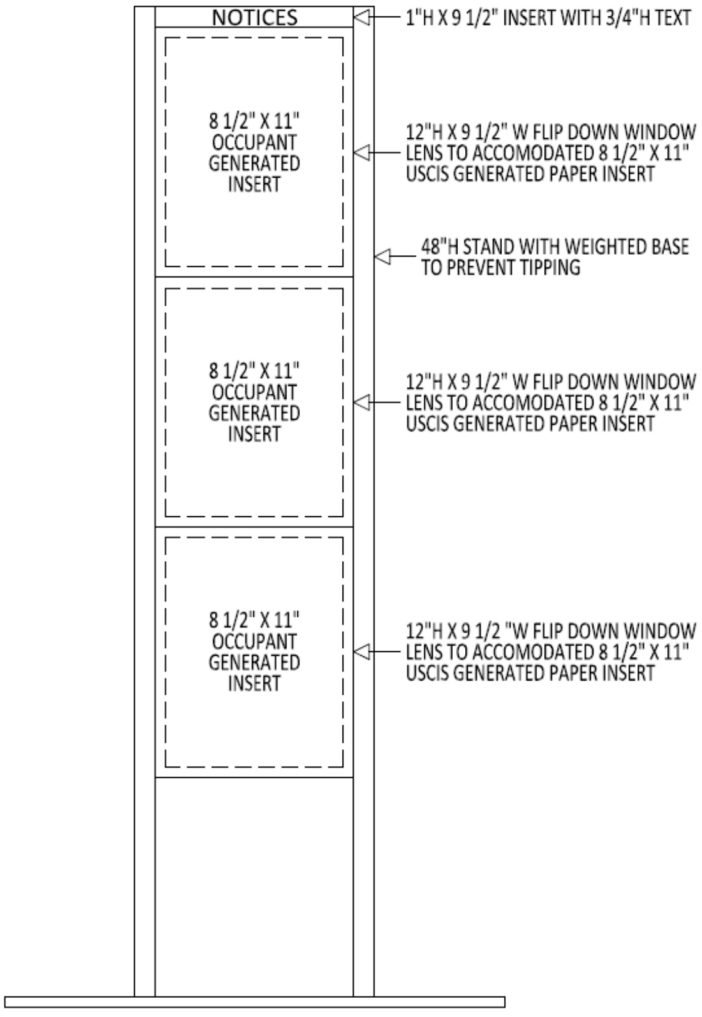
Entry Doors[12] shall include the DHS Seal above "U.S. Citizenship and Immigration Services" and the days and hours of operation as well as "Closed All Federal Holidays". If the lobby is accessed by more than one set of doors this shall be included on each door set. If a door is for egress only, provide direction to the entry doors in English as well as in the second language.

STANDARD SIGNS (continued)

LOBBY SIGNS (CONTINUED)

Notices Sign[12] shall be a freestanding floor sign placed just prior to the security checkpoint(s) at the main entry to the lobby. It will provide direction on security screening information, federal property regulations and other important information to visitors. The sign shall be configured as follows:

- Top DHS Blue insert that is approximately 1"H with ¾"H DHS Light Grey text reading "NOTICES".
- Three hinged non-glare clear window covering 3 slots for USCIS generated 8 ½W x 11"H paper inserts on DHS Light Grey backboard.
- 48" weighted DHS Blue floor stand.



STANDARD SIGNS (continued)

U.S. CITIZENSHIP AND IMMIGRATION SERVICES SIGNS include a DHS seal and raised lettering. They are to be included in all USCIS Conference/Training/Naturalization Ceremony Rooms. They also may be required in the lobby when space permits. They shall be scalable (i.e. the font size and seal size should increase or decrease due to space limitations and to provide an appropriate scale). The signs shall be configured as follows:

- The seal shall be color and protrude from the wall the same distance at the raised aluminum Joanna MT text.
- Raised aluminum letters "U.S. Citizenship and Immigration Services" followed by the name of the office.
- If the ceiling height exceeds 9'-0" the DHS seal size shall be approximately 30" and the font size shall be approximately 4"H except for the name of the office which shall be approximately 3"H.
- If the ceiling is 9'-0" or less the DHS seal size shall be approximately 24" and the font size shall be approximately 3"H except for the name of the office which shall be approximately 2"H.
- Text may be below the seal or to the right of the seal.

NUMBERING SCHEME

In most instances the room number shall match the room numbers indicated on the construction drawings. However, in some cases a different numbering scheme may be necessary when the building has multiple tenants to avoid more than one room having the same room number within the building. In such cases the USCIS Project Manager will provide guidance for the needed room numbering scheme.

TYPICAL NUMBERING SCHEME – is three or four digits. In most cases three digits will be used with the first digit indicating the floor. In cases when more than 100 rooms exist on a given floor or in buildings with more than nine floors four digits will be required.

WORKSTATION NUMBERING SCHEME – shall start with the room number followed by the workstation number. For example if four workstations are located in room 101, the workstations would be labeled 101.1, 101.2, 101.3 and 101.4.

Interior Signage Standards

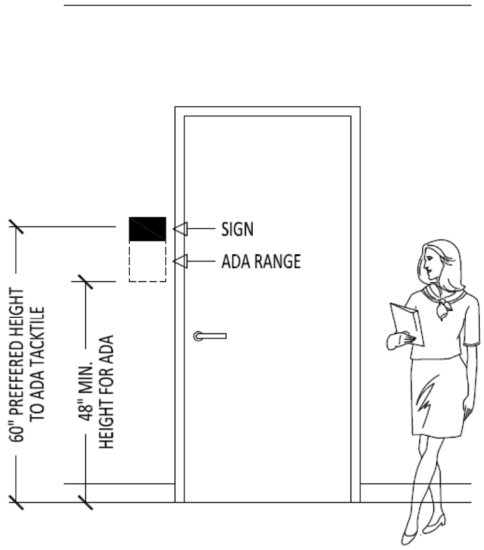
U.S. Citizenship and Immigration Services

MOUNTING REQUIREMENTS

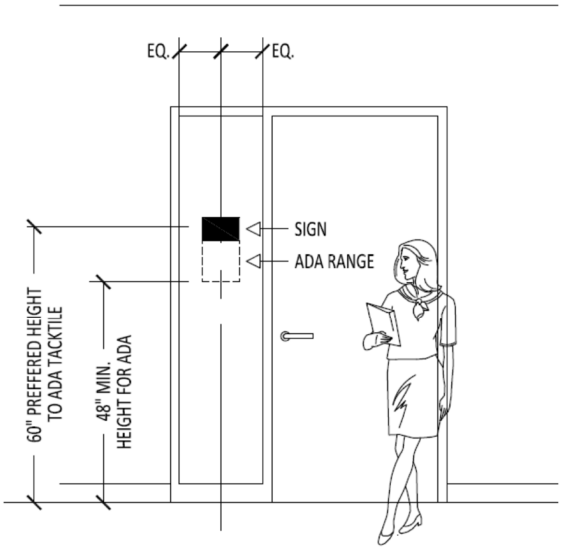
Unless indicated elsewhere in this document the mounting locations shall follow the instructions below.

Wall signs – shall be mounted:

- within the ADA required range
- at a consistent height
- to the side of the door whenever possible rather than being mounted on the door
- 60”AFF is the preferred height to the baseline of the ADA tactile
- with an appropriate backer when mounted on glass to provide a professional appearance of the opposite side of the glass
- at a consistent distance from the door frame or inside / outside wall corner (the optimal distance is 2”)



WALL MOUNTED



SIDELIGHT MOUNTED

NOTE: ONLY AT 18"W SIDELIGHTS. FOLLOW WALL MOUNTED DIMENSIONS ON WIDER SIDELIGHTS OR OTHER SURFACES.

Workstation signs – shall be mounted:

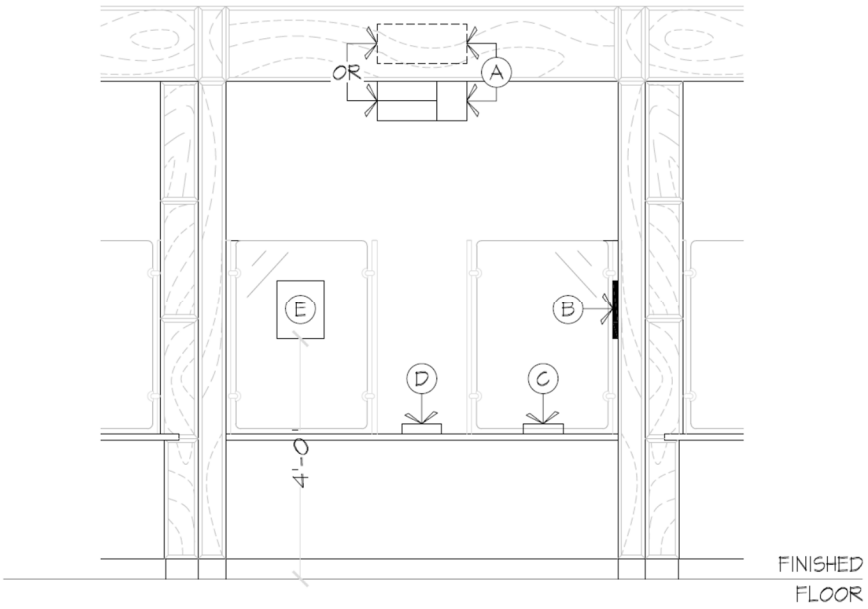
- magnetically fastened
- centered on the side of the metal storage tower facing the aisle
- at the same height as wall signs

Overhead signs – shall be mounted:

- on wall or may be ceiling suspended
- with clearance below the sign shall be a minimum of 84”
- at consistent height
- centered within the corridor (width)
- at a consistent distance from the inside / outside wall corner when not centered within a corridor (the optimal distance is 2”)

MOUNTING REQUIREMENTS (continued)

Information Counter Mounting Locations shall be as depicted below for each information counter. See sign types for details for each sign. Please note that the design of the information counter may vary and mounting locations may need to be adjusted based on actual design. Please consult USCIS Project Manager if changes are needed as a result of actual information counter design.



POINTS OF CONTACT AND ROLES AND RESPONSIBILITIES

USCIS Project Manager is the primary contact for general information, reviewing placement of signs and identifying additional requirements:

enter name
title
phone numbers
e-mail address

USCIS Local Contact is responsible for providing input into names, languages, etc. as well as reviewing the sign packages in conjunction with the USCIS Project Manager:

enter name
title
phone numbers
e-mail address

GSA Contracting Officer has sole authority for the Government to approve changes to the contract.

enter name
title
phone numbers
e-mail address

General Contractor – is contracted by the lessor or General Services Administration and is the only party that can enter into contract with the sign contractor.

enter name
title
phone numbers
e-mail address

USCIS Office of Information Technology

AUDIOVISUAL STANDARDS

1 APRIL 2019

Table of Contents

Edwin D Morman CTS-D CTS-I
VideoSupportTeam@USCIS.DHS.Gov

1 Audiovisual / VTC Overview

The US Citizenship and Immigration Services (USCIS) Office of Information Technology (OIT) is, within this document, delineating standards for audiovisual systems. The designs are intended to compliment the facility designs set out in the Space Allocations Design Guide Documents. This document, when adhered to, will ensure that infrastructure is in place for an appropriate level of equipment based on the requirements of each type of standard space within USCIS.

By standardizing the system designs and user interfaces we enable help desk support of rooms, remote troubleshooting, standard maintenance agreements, and ease of upgrade. By standardizing components we simplify maintenance allow remote monitoring and ensure ease of use when traveling between office locations.

OIT has defined the following AV standards and systems. These designs should meet most typical USCIS Office needs. Organizations or Facilities that have requirements outside of the scope of these designs should contact OIT for a design tailored to their technical needs and the layout of their space.

Outlined in this document are the USCIS A/V standards by space type:

- AV1 Conference Room / Large Training Room
- AV2 Naturalization Room
- AV3 Teaming Space / Large Training Room
- AV4 Desktop Videoconferencing System
- AV5 Digital Signage
- AV6 Overhead Paging

2 General Assumptions

The standards identified have been deigned around the following guidelines;

2.1 USCIS Laptop computers (PC or MAC) will be used in USCIS meeting spaces. Laptop computers will be connected to the USCIS Wireless Network. The primary connection method for USCIS laptops (PC or MAC) will be over the network using a network to HDMI gateway connected to the system. For external organization laptops or other devices a hardwired HDMI cable shall be provided for connectivity. Laptops are expected to use enterprise wireless or a wired USCIS connection. Use of a cellular connection with VPN will work but the quality of the connection will be greatly reduced. For naturalization ceremonies or other live or public events it is recommended that the wired connection be used to guarantee signal quality.

2.2 Wireless keyboards and mice shall comply with OIT Policy Letter "Use of Bluetooth Wireless Technology on Government Furnished Equipment" Dated April 22nd 2010 and "Bluetooth Decision Memo" Dated April 22 2010.
Wireless Keyboards are specified for use in conference spaces only. Wireless systems shall only be used where a wired system is an impractical option. Wireless systems

shall not use Blue Tooth Technology. Wireless systems shall use encrypted wireless technology that shall be a minimum of 128 bit AES encrypted.
(Logitech 2.4GHz Advanced Wireless Technology or equivalent shall be used)

2.3 All systems shall have a common input connector and resolution. That connector shall be an HDMI digital input connection. The native resolution of all systems shall be 4K 3840x2160@60hz. All source devices and displays shall be compliant with this standard resolution. HDMI, DVI and Display Port are essentially the same video signal format on different connectors. All USCIS laptops are specified with either a Display Port output or issued with an adaptor that provides display port output. The end user is responsible for conversion to HDMI from this output or adaptor. An adaptor will be provided with each system for Display Port to HDMI conversion.

2.4 HDCP compliance will not be enforced within the systems. The Video Conferencing codec systems which make up the heart of USCIS systems are not HDCP compliant. Any devices requiring HDCP compliance such as cable or satellite boxes will not be compatible with HDMI inputs on USCIS systems. They may be connected locally directly to the display secondary input and switched manually. OIT is not responsible for the proper operation Cable TV or the procurement of Cable TV services.

2.5 Display sizes shall be selected based on the following typical content. Content is expected to be as follows: Naturalization Ceremony room content will be primarily high definition video with captioning or PowerPoint with large fonts. Training room content will be primarily web based content and Power Point with 20 point font or higher. Small conference room content will be a combination of power point, excel, and high definition video. Displays will be sized appropriately for viewing of this level of content based on a measurement from the screen to the furthest viewer in the case of conference rooms and training rooms. This measurement shall be the screen to the fourth row in the case of Naturalization Ceremony Rooms. Displays shall be sized using the following formula.
((Distance in Inches to furthest viewer)/150)*21 = Needed Diagonal Screen Size

2.6 The Americans with Disabilities Act of 2010 (ADA) and ADA Standards for Accessible Design will be complied with in all designs. Requirements can be found at www.ada.gov. The ADA regulations require that any public space with audio reinforcement have assisted listening systems available. Any system with audio reinforcement shall have the minimum number of assistive listening devices required by the regulations and a minimum of two shall have inductive neck loops to interface with hearing aids. In compliance with the ADA no suspended device shall extend lower than 6'-8" above finished floor (AFF). No wall mounted device, mounted higher than 27" AFF shall project further than 4" without installing a cane plate or other method of preventing a seeing impaired person from colliding with the obstacle. To comply with Title II of the ADA under "Equally Effective Communication"; Videos played at Naturalization Ceremonies are provided with captioning. Displays will be sized to allow closed captions to be read by persons with normal vision or vision corrected to 20/20 from the first several rows of seating not from all rows of seating. Hearing impaired persons requiring caption accommodation will be placed in these rows.

2.7 BLU-RAY, DVD, and or VHS decks will not be provided. It is expected that the built in PCs will have built in DVD or BLU-RAY drives and that ROXIO or another approved software solution will be used to playback content. It is expected that on laptops multimedia files will be used for playback.

2.8 16:9 aspect ratio flat screen displays meeting the resolution requirement in 2.3 will be used up to 98 inches. For screens larger than 98 inches projector and screen shall be used. All projectors and projection screens will be 16:9 aspect ratio. Projection screens will be manually operated wall mounting type. Screens shall have black masking borders standard on flame retardant and mildew resistant fiberglass fabric, mounted on a ball bearing rigid steel spring roller. To be equipped with Controlled Screen Return (CSR) to control the return speed of the screen surface back into the case. Screen fabric shall be permanently attached to roller. Screen casing shall have powder coated white 21-gauge steel case with flat back design. Ambient light levels will be taken into account when selecting projectors. Typically training room projectors will be a minimum 6000 lumens.

2.9 Video conferencing systems will be Cisco Webex RoomKit or RoomKit+ systems with Cisco Quadcameras. Systems will be selected to take advantage of codecs with maximum compression thereby minimizing bandwidth requirements. Systems will be specified to be compatible with OIT infrastructure systems. Each Codec added to a site will require 1920k of network bandwidth. Codecs will be capable of 720p native resolution on the point to point video connection. Codecs must be compatible with WebEx and manageable by USCIS Enterprise VTC equipment. Video conferencing in rooms will be set to automatically answer incoming calls. Microphones on the receiving site will be muted when a call comes in for privacy and must be unmuted using the VTC remote.

2.10 Control surfaces will be provided for all conferencing systems. A 10 inch intuitive touchscreen control and system automation will be employed to minimize the amount of user interaction needed to control and operate the systems. A single common control surface will be used to minimize learning curve between systems. A key lockout with a single on/off button will be implemented for systems installed in customer accessible spaces to disable systems when not in use. Control code and configuration of systems shall be owned and managed by USCIS to standardize operation and automation among all systems.

2.11 Systems will be designed in accordance with the Guiding Principles for Sustainable Federal Buildings. The AV systems will be energy star listed where possible and comply with all federal energy saving regulations and requirements. The systems will automatically shut down when not in use for a programmed period of time. Every effort will be made to minimize the energy footprint of the systems.

3 AV Standards Defined

3.1 AV1 - USCIS Conference Room or USCIS Large Training Room

This system standard applies to conference rooms off all sizes with conference table style configuration. It also applies to large training or multipurpose rooms supporting more than 20 students and requiring a display larger than 70" based on 2.5 above.

The AV1 system shall be controlled by a single 10" touch screen remote control tied to the VTC codec with 2 or more displays. The system shall automatically turn on and switch to the correct input on the display when receiving a video call. The system shall display a PC or laptop input when present and have the ability to turn on and off the computer content using the touch screen control. The system shall automatically turn off after a programmed period when not in a video call and no computer source is actively displayed. VTC codec shall provide both video and telephone conferencing.

3.1.1 USCIS AV1 Room System

This system shall consist of two 43 inch to 98 inch display(s) mounted on the wall. Screen size will be determined in accordance with section 2.5 above. A high definition video conferencing camera shall be mounted on the wall centered below the displays. The lens of the camera will be centered at the seated eye height of 48 inches. The system will have an input device mounted to the bottom of the conference table instructor's desk or room lectern. The box will connect by a single CAT6 cable to a wall or floor box location. The input box shall have one HDMI input with an HDMI monitor out for local display. The input box shall have a USB input for computer microphone and speaker connection to the room sound system. A laptop cable shall be connected to the HDMI input. The input box shall pass its signal to the video conferencing unit mounted with the Camera. The video conferencing unit shall be connected to the display(s) via HDMI connection. Where there is no VTC unit the video shall be fed directly to the displays. The feed from the input box to behind the TVs shall be a single CAT6 cable allowing the box to be located up to 300 feet away from the displays. Sound will be provided by 4 ceiling flush mounted loudspeakers. A Ceiling microphone array shall be installed in a 2x2 ceiling grid opening. The microphone array will be software divided into up to 8 microphone lobes dependent on the size of the room. An approved wireless keyboard and mouse shall be provided for use with an optional room computer to be provided by the gaining organization. All other equipment except the USCIS computer shall be mounted behind the displays.

Five options will be available for this room system. These options can be added singularly or in combination. Option one (-T) for systems with 65" or 75" screen sizes based on 2.5 above. This option adds touch annotation capability by either replacing the right display in a dual display system or replacing an additional display with a 65" or 75" touchscreen display. Option two (-R) will be add a rear camera to the system as a presenter camera focused on the presenter area. The presenter camera will automatically track the presenter. Option three (-D) will add additional displays sized in accordance with 2.5 above. Option four (-M) will add wired XLR microphone inputs and XLR line level audio outputs. Option five (-S) will add a scheduling panel.

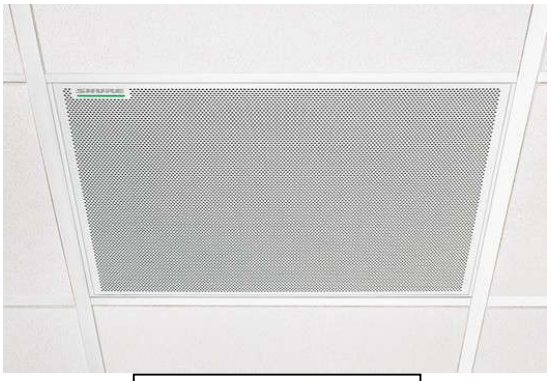
3.1.2 This system type will have the following major components;

(2) 4K non-touch displays 55-98 inches
(1) Cisco Room Kit or Room Kit Plus Video Conferencing System
(1-2) Shure MXA910 Ceiling Microphone Arrays
(1) Shure ANIUSB-MATRIX Audio Digital Signal Processor
(1) Crestron HD-EXT-USB-2000-C HDMI and USB Extender
(1) Crestron AirMedia AM-200 LAN to HDMI gateway
(1) RDL SF-NP16E 16Watt 70Volt POE Amplifier
(2-4) JBL Control 24 CT Micro Ceiling speakers (4 Watt Tap)
(1) POE Network Switch BV Tech POE-WB908 for audio distribution

3.1.4 The Independent Government Cost Estimate is $30K to $40K

3.1.5 AV-1 Installed – Typical Diagrams

Touch Panel



Ceiling Microphone

Typical Wall Elevation

3.2 AV2 – USCIS Naturalization Room

This system standard applies to a large public ceremony space that be used for Naturalization Ceremonies and for all hands meetings on sites. Naturalization Rooms typically have ceiling heights 12 feet six inches or higher. The room will typically contain a portable 6 inch height stage as a presenter area and large audience in auditorium layout seating.

The AV2 system shall be controlled by a single 10" touch screen remote control tied to the VTC codec with 2 or more displays. The system shall automatically turn on and switch to the correct input on the display when receiving a video call. The system shall display a PC or laptop input when present and have the ability to turn on and off the computer content using the touch screen control. The system shall automatically turn off after a programmed period when not in a video call and no computer source is actively displayed. The system shall have a lapel and handheld wireless microphone and input capability to support 2 user supplied wired microphones.

3.2.1 USCIS AV2 Room System

The system shall consist of 2 or more flat screen displays. Where section 2.5 requires a screen size larger than 98 inches, a ceiling mounted projector with a manual wall mounted screen complying with 2.7 above shall be specified. Where projectors are required they shall be installed in compliance with section 2.5 above.

An input box shall be provided with an HDMI and USB input. The USB input shall allow the laptop computer connected to utilize the room microphone and loudspeakers. The input box may be installed below the stage, on the wall, or in a lectern. The input box shall have a single CAT6 cable connection to a wall plate designated the AV input plate. The AV input plate shall be at outlet height behind the stage that shall feed the AV system. There shall be a two gang decora style plate next to the AV input plate with two XLR microphone inputs and two XLR line outputs. The input plate shall pass its signal to the video conferencing unit mounted below the left display. The CAT6 cable between the two devices may be up to 300 feet in length. The video conferencing unit shall be connected to the display(s) via CAT6 HDMI extenders. Sound will be provided by 2 wall mounted small line array loudspeakers placed appropriately for full coverage of the room. A 15 foot HDMI cable will provided for laptop connection. An approved wireless keyboard and mouse shall be provided for the laptop computer.

Two wireless microphones shall be provided. The wireless microphones shall be one handheld and one lapel microphone. The lapel microphone shall have an omnidirectional microphone element. The two wired microphones, the two wireless microphones, and the audio output of the codec shall be mixed at a wall mounted rack to feed two wall mounted line array speakers and an assistive listening system. Line array loudspeakers shall provide an even coverage with no more than a 6 dBSPL from the first to last row of seating. Two ceiling mounted microphone arrays shall be installed to feed the video conference codec only. They shall be placed on the right and left sides of the stage to cover the room. These microphones can be muted on the call

using the mute button on the 10" touch panel control without muting the wireless and wired microphones within the room. Volume control for all microphones shall be preset and controlled by software interface from the wall mounted rack in the AV storage room. Computer audio shall be controlled at the PC or Laptop. The level shall be preset for a commercial line level device at -4dBm. The system will meet all energy conservation regulations per section 2.10 and will turn off when no input device is connected or sending signal and the VTC has been out of a call for a programmed period. The system shall have an ADA assistive listening system transmitting on an unencrypted FM frequency. The ADA system shall be sized for the room per section 2.5. The VTC codec shall provide both video and telephone conferencing.

This system type will automatically be equipped with two options. Option one (-R) will be add a rear camera to the system as a presenter camera focused on the presenter area. The presenter camera will automatically track the presenter. Option two (-M) will add wired XLR microphone inputs and XLR line level audio outputs.

In addition the (-D) option may be added for larger naturalization rooms or for rooms with columns or odd shapes that hinder sight lines. Or the (-P) option may be added for rooms where a 98 inch display does not meet the display size requirement of section 2.5 above. The (-T) option is not available for this system.

3.2.2 This system type will have the following major components;

(2-4) 4K non-touch displays 65-98 inches
(1) Cisco Room Kit Plus
(1) Cisco P-60 PTZ Camera in back of room
(1-2) Shure MXA910 Ceiling Microphone
(1) Shure ANIUSB-MATRIX Audio Digital Signal Processor
(1) Shure ULXD4D Digital Wireless Microphone Two Channel Receiver
(1) Shure ULXD1 Digital Wireless Microphone Belt Pack Transmitter
(1) Shure ULXD2/SM58 Digital Wireless Microphone Hand Held Transmitter
(1) Shure SM93 Omnidirectional Lapel Microphone
(1) Shure SBC200 dual docking charger for ULX1 and ULX2
(1) RDL DD-BN22 2 gang white decora input / output plate
(1) Crestron HD-EXT-USB-2000-C HDMI and USB Extender
(1) Crestron AirMedia AM-200 LAN to HDMI gateway
(1) Extron NETPA1001 100Watt 70Volt Amplifier
(2) JBL CBT 50LA-1 line array loudspeakers (tapped at 30Watts)
(1) POE Network Switch BV Tech POE-WB908 for audio distribution
(1) Williams Sound PPAT27 Assistive Listening System

3.2.3 The Independent Government Cost Estimate for this system is $30K - $40K

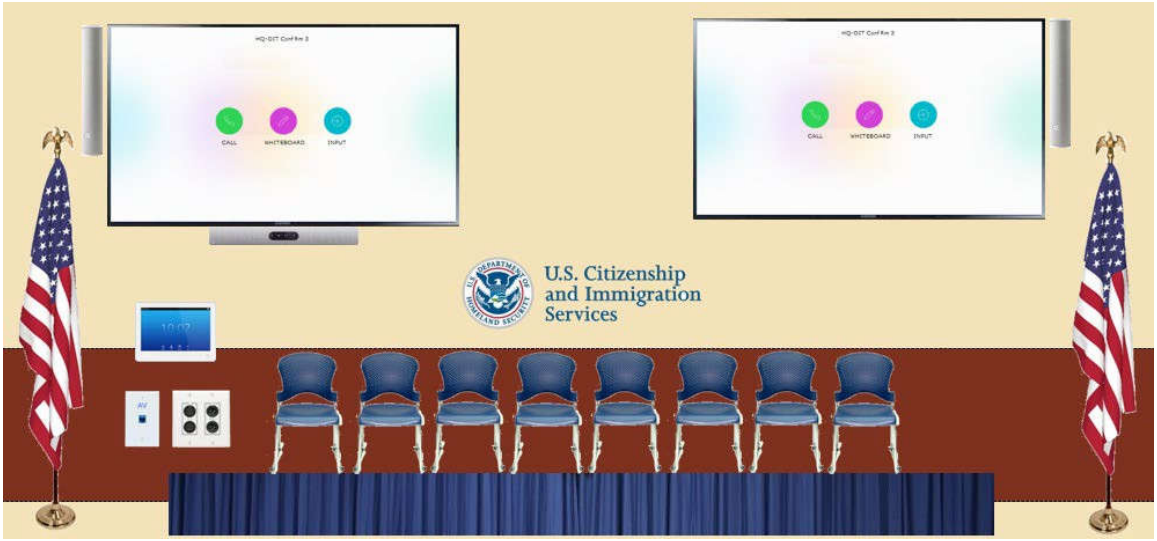
3.2.4 AV-2 – Typical Diagram

Touch Panel

Ceiling Microphone

Rear Camera

Wireless Microphones in Charger



Typical Wall Elevation

3.3 AV-3 USCIS Collaboration Room, Office, or Small Training Room

This system standard applies to small 4-10 person teaming spaces that that are used for small team collaboration. This system also applies to small training rooms that are used for less than 20 students. The system can be wall mounted in an office.

The AV3 system shall be controlled by on screen touch controls on the single flat screen display in the system. The system shall automatically turn on and switch to the correct input on the display when receiving a video call. The system shall display a PC or laptop input when present and have the ability to turn on and off the computer content using the touch screen control. The system shall automatically turn off after a programmed period when not in a video call and no computer source is actively displayed. The system shall provide both video and telephone conferencing.

3.3.1 USCIS AV3 Room System

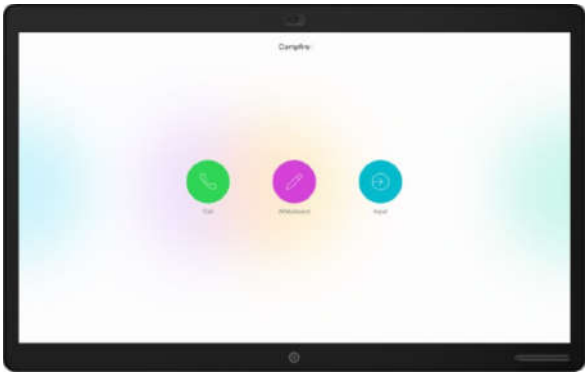
The system shall consist of 1 touch enabled flat screen display. The display shall be 55", 70", or 85" and sized in accordance with section 2.5 above. All audio and video functions of the system shall be contained within the display. An HDMI input cable shall be provided for wired input to the system. The system shall also accept video input over LAN from a USCIS laptop computer on the USCIS wireless network. The system shall natively support WebEx calls. The system shall automatically turn off after a programmed period when not in a video call and no computer source is active. This system allows on screen white boarding and annotation over content. This system can be ordered as a portable system with the (-C) cart mounting option. The (-S) scheduling panel option is also available for this standard.

3.3.2 This system type will have the following major components;

(1) Cisco 55", 70", or 85" WebEx Board
(1) Crestron AirMedia AM-200 LAN to HDMI gateway

3.3.3 The Independent Government Cost Estimate for this system is $19K - $45K

3.3.4 AV-3 – Typical Diagram



WebEx Board

3.4 AV-4 Desktop Videoconferencing System

There are two options for desktop video conferencing. The first option is a dedicated hardware solution. This option is a small room/desktop system for video and audio conferencing that can be easily setup within executive offices and small conference spaces. A typical small conference space would be a small round table supporting 2-4 persons. The second option is the PC based software solution WebEx supporting a single end user at his or her PC. The laptop webcam and microphone would be used or a webcam for the PC solution can be purchased by the local site and installed by the local IT staff.

3.4.1 The hardware executive desktop/small room solution includes video conferencing and content sharing. The desktop unit has a large (22") widescreen display for presentation of graphics, spreadsheets and multimedia files. Control of the system is through the touch screen graphical interface. Annotation is enabled using the touchscreen.

3.4.1.1 This system type will have the following major components;

(1) Cisco WebEx DX-80 executive desktop system

3.4.1.2 The Independent Government Cost Estimate for this system is $2.5K

3.4.3 AV-4 – Typical Diagram

AV-4 Desktop VTC Unit

3.5 Digital Signage

This standard applies to two types of systems. The first is the system commonly called Q-Flow that is a waiting area digital signage system that used for queuing and alerting applicants in an information or adjudications waiting room. The second is for internal facing digital signboards that are used to convey information to USCIS employees.

3.5.1 AV5 Q-FLOW

The AV5 Q-Flow display system will be 1 to 7 displays wall mounted around a USCIS waiting room. The displays shall be installed on walls that are in the viewing area of the waiting room seats. The majority of the seating shall be contained within an area that is within 45 degrees off axis off the display or displays.

3.5.1.1 The displays used shall be sized for the viewing of the text used by the Q-Flow system. The displays shall be sized in accordance with section 2.5 above.

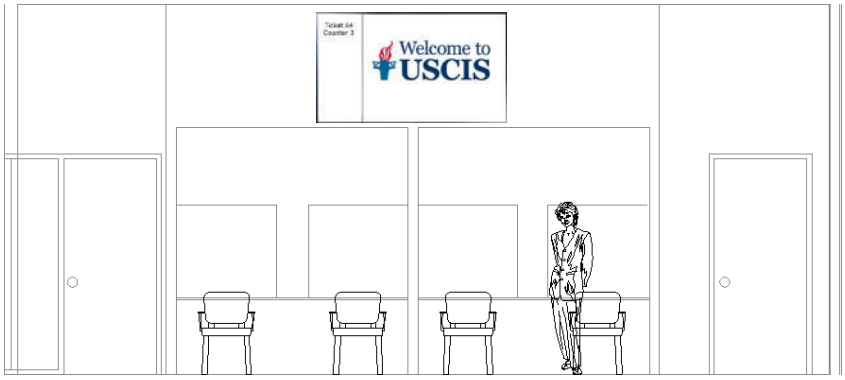
3.5.1.2 The displays shall be installed in compliance with the Americans with disabilities act. The bottom edge of the display shall not be lower than 6'-8" above finished floor in a circulation path. The audio output from the Q-Flow computer shall be tied to the background music input of the overhead paging system to broadcast audio for visually impaired applicants. Audio will feed into all public area of a site to include guest restroom area, security entry area, and waiting room.

3.5.1.3 This system type will have the following major components;

(1-7) 4K non-touch displays 43-65 inches
(1) Media PC provided by site
(1) Broadata LinkBridge LBC-SPH4-1H3B-EIR, or LBC-SPH8-1H7B-EIR transmitter
(1-7) Broadata LinkBridge LBC-HDBT-RX

3.5.1.4 The IGCE for this system is. ($8K plus $2K per display)

3.5.1.4 AV5 – Q-Flow Typical Diagram



3.5.2 AV5 Internal Digital Signage

The AV5 internal digital signage display system will be 1 to 7 displays wall mounted at a USCIS office location. Displays that are within 300 feet cabling distance of an IDF closet can be fed from a single signage medial player.

3.5.2.1 The displays used shall be sized for the viewing of the text in accordance with section 2.5 above.

3.5.2.2 The displays shall be installed in compliance with the Americans with disabilities act. The bottom edge of the display shall not be lower than 6'-8" above finished floor in a circulation path. This system can be ordered as a touch screen system with the (-T) Touch Screen Display option. No other options are available for this system.

3.5.2.3 This system type will have the following major components;

(1-7) 4K non-touch displays 43-65 inches
(1) FWI CS-CPFWI Media Player PC
(1) Broadata LinkBridge LBC-SPH4-1H3B-EIR, or LBC-SPH8-1H7B-EIR transmitter
(1-7) Broadata LinkBridge LBC-HDBT-RX

3.5.1.4 The IGCE for this system is. ($10K plus $2K per display)

3.5.1.4 AV5 – Digital Signage Typical Diagram

AV5 Sign Wall Installation

3.6 Overhead Paging

This standard is for overhead paging at a USCIS site. The overhead paging system is used in the waiting room for Q-Flow or waiting room paging. It is used building wide for active shooter announcements or announcements that need to be communicated site wide.

The system is designed to interface with the site telephone system and page using the extension 100-7246 (PAGE) followed by a two digit number.
00 pages the entire site
01 pates just the public waiting rooms
02 pages just the private USCIS space

3.6.1 The system shall be designed to provide a level of 15dB above the background noise level in all spaces. The system shall provide overall +/- 3 dB coverage in all areas. Paging audio shall be intelligible in all space. Privacy sound masking may be provided in hallways outside of adjudication or asylum officer offices. Masking is designed to make it difficult for someone in the hallway to overhear a conversation in an office interview.

3.6.2 The system shall have 6 zones. Audio in these zones can be adjusted independently.

Zone 1 – Q-Flow and Waiting Room Audio
Zone 2 – Adjudication or Public Hallways (Privacy Sound Masking provided)
Zone 3 – Non Public Hallways
Zone 4 – Private Offices, Conference Rooms, Naturalization Rooms, Training Rooms
Zone 5 – Open Office Cubical Spaces
Zone 6 – ASC space if present

3.6.3 This system type will have the following major components;

(1) Bogen PCM-SYS3
(1 per floor) Cambridge QT-100, QT-300, or QT-600
(1 box per 400sf) Cambridge E-A-W-16-4 or E-A-W-30-4 QT-Emitters
(1 per waiting room) RDL RU-ADA4D or RU-ADA8D

3.6.4 The Independent Government Cost Estimate for this system is $1.50 per sq/ft

AV6 Ceiling Loudspeakers

4. System Options

4.1 Option (-T)
Touchscreen Display Option

This option is available for AV1 systems where the display size is 55", 65", or 75". This option is available for an AV5 system with a single 55" display. This option changes out the right display in a two display system for a display with a touch interface and integrated annotation software. This option changes out the non-touch 55" display from the AV5 to a touch display and changes the HDMI extender set with an HDMI and USB extender set.

4.1.1 This system type will have the following major components;

AV1-T
(1) QB65H-TR", or QB75H-TR 4K Touch Screen
Remove (1) 65", or 75" 4K non-touch display

AV5-T
(1) PM55F" 4K Touch Screen
(1) Crestron HD-EXT-USB-2000-C HDMI and USB Extender
Remove (1) 55" 4K non-touch display

4.1.2 The Independent Government Cost Estimate for this system is $5K

4.1.3 Annotation Display Typical

Touchscreen Annotation Display

4.2 Option (-R)
Rear Camera Option

This option is available for AV1 systems with display size 65" or greater. It is included in the AV2 system. This adds a second camera to the VTC system. The second camera is mounted in the back of the room and facing the presentation area. Power and data connection are extended to the display location in the front of the room for the AV1 and the Rack location for the AV2.

4.2.1 This system type will have the following major components;

(1) Cisco Precision 60 Camera wall mounted in the back of the room
(1) Vaddio Recessed Camera Enclosure for Precision 60
(1) Broadata LinkBridge LBC-HDBT-RX HDMI CAT6 Extender Receiver
(1) Broadata LinkBridge LBC-HDBT-TX HDMI CAT6 Extender Transmitter

4.2.2 The Independent Government Cost Estimate for this system is $5K

4.2.3 Rear Camera Typical

Precision 60 Camera

4.3 Option (-D)
Additional Content Display Option

This option is available for AV1 and AV2 systems. It is included in some AV2 systems automatically depending on room size and configuration. This adds between 1 and 5 additional displays to an AV1 or AV2 room system. The total number of displays cannot exceed 7. The displays are sized in accordance with 2.5 above.

4.3.1 This system type will have the following major components;

(1-5) additional 4K non-touch displays 43-65 inches
(1) Broadata LinkBridge LBC-SPH4-1H3B-EIR, or LBC-SPH8-1H7B-EIR transmitter
(1-5) Broadata LinkBridge LBC-HDBT-RX

4.3.2 The Independent Government Cost Estimate for this system is $2-10K

4.3.3 Display Typical

Typical 4K Display

4.4 Option (-M)
Wired Microphone Option

This option is available for AV1 and AV2 systems. One plate is included in AV2 systems automatically. This adds the ability to feed two wired microphones into a wall plate in the front of the room and take line level outputs to feed end user equipment such as stage monitor speakers or press feeds.

4.4.1 This system type will have the following major components;

(1) RDL DD-BN22 Wall-Mounted Bi-Directional Mic/Line Dante Interface 2x2

4.4.2 The Independent Government Cost Estimate for this system is $1K

4.4.3 Audio Wall Plate Typical

XLR Microphone In and Line Audio Output Plate

4.5 Option (-C)
Mobile Cart Option

This option is available for AV3 systems. This option provides a portable cart stand for the WebEx Board system so that it can be moved from room to room.

4.5.1 This system type will have the following major components;

(1) AVITEQ RPS-500-BB-CSB55W or RPS-500-BB-CSB70W DymamiQ Cart
Remove (1) Fixed Wall mount for WebEx Board

4.5.2 The Independent Government Cost Estimate for this system is $2K

4.5.3 Cart System Typical

WebEx Board Cart

4.6 Option (-P)
Projector Option

This option is available for AV2 systems. This is available where the formula in 2.5 above returns a screen size that cannot be met by a flat screen display.

4.6.1 This system type will have the following major components;

(1) Vivitek DK8500Z 4K 7500 ANSI Lumen Projector
(1) Da-Lite 79884, 79886, or 79888 MODEL C Wall Mounted Screen - 16:9 Soft Return
Remove (2-4) 4K non-touch displays 65-98 inches

4.6.2 The Independent Government Cost Estimate for this system is $22K

4K 7500 ANSI Lumen Projector

16:9 Manual Projection Screen 119”, 133”, or 159” Diagonal

4.7 Option (-S)
Scheduling Panel Option

This option is available for AV1 and AV3 systems. This option adds a room scheduling panel outside the door of the room. The scheduling panel ties to the outlook calendar for the room to show the upcoming schedule and allow ad hock booking of the space.
The screen shall be mounted at 48 inches for ADA compliance and tilts out from the wall for ease of use by a standing operator. There is a light bar surrounding the unit that gives a green or red status for the room. Green when available and red when booked.

4.7.1 This system type will have the following major components;

(1) Crestron - TSS-10-W-S-LB KIT 10.1 Inch Room Scheduling Touchscreen

4.7.2 The Independent Government Cost Estimate for this system is $2K

Room Scheduling Touchscreen

5. Correlations to the USCIS Space Allocation Design Guide

A/V Equipment A/V standards have been developed by OIT for USCIS. For Field Operations LAP projects OIT provides the equipment for the office Director's conference room, the Naturalization Ceremony Room, the Computer Training Room, the waiting rooms, and Break Room. Service Center operations sites will be evaluated by project as their size and number of AV spaces vary greatly. At a minimum OIT provide equipment for the office Director's conference room, Multi-Purpose Room, Computer Training Room, and Break Room. The LAP program will fund the infrastructure needed to support the A/V equipment (electrical, cable drop, etc.) and OIT will fund and install the equipment.

5.1 TAB 1: Field Operations Facilities and Asylum

Space Type	Description	Square Footage	Seats	Section Correlation
Field Office				
1.2.2	Break Room	Varies	Varies	AV5
1.3.1	Medium Conference Room	300	10	AV1
1.3.2	Computer Training Room	300-750	20-25	AV1-TR
1.3.3	Conference / Multi-Purpose	600	10-20	AV1
1.3.4	NATZ Room	Varies	Varies	AV2
1.5.2	Waiting Room	Varies	Varies	AV5
District Office				
1.8.1	Break Room	100	4	AV5
1.8.4	Medium Conference Room	300	10	AV1

5.2 TAB 2: Service Center Operations Facilities

Space Type	Description	Square Footage	Seats	Section Correlation
Conference / Training (CT)				
1.2.2	Break Room	Varies	Varies	
1.3.1	Multi-Purpose Room (Divisible)	1400	Varies	AV1-M
1.3.2	Large Conference Room	600	20	AV1-D
1.3.3	Medium Conference Room	300	10	AV1
1.3.4	Small Conference Room	192	6	AV3
1.3.5	Collaboration Room	300	10	AV3
1.3.6	Computer Training Room	300-750	20-25	AV1-TR

Section 6 Infrastructure Requirements by Standard

6.1 General

This section address the infrastructure needed to support the AV1, AV2 and AV3 standard systems. Infrastructure coordination includes locations of power, data, conduit, wall boxes, and plywood wall blocking to support displays and screens.

6.1.1 Display Back Box

In new construction, a Chief PAC525FCW In-Wall Storage Box with Flange and Cover (White) will be installed behind each display location. The box location shall be defined in the AV coordination drawing set. In an AV1 system the box shall be centered on the conference table location as defined by the floor box location that will be under the table support pedestal. In an AV1 or AV3 system the box will be installed centered at 5'-5" above finished floor. For an AV2 system the location will vary depending on the expected display size and location.

Each Chief PAC52FCW will require one duplex power receptacle installed in the top of the box on the one side, and a standard data plate with 2 ports on the other side.

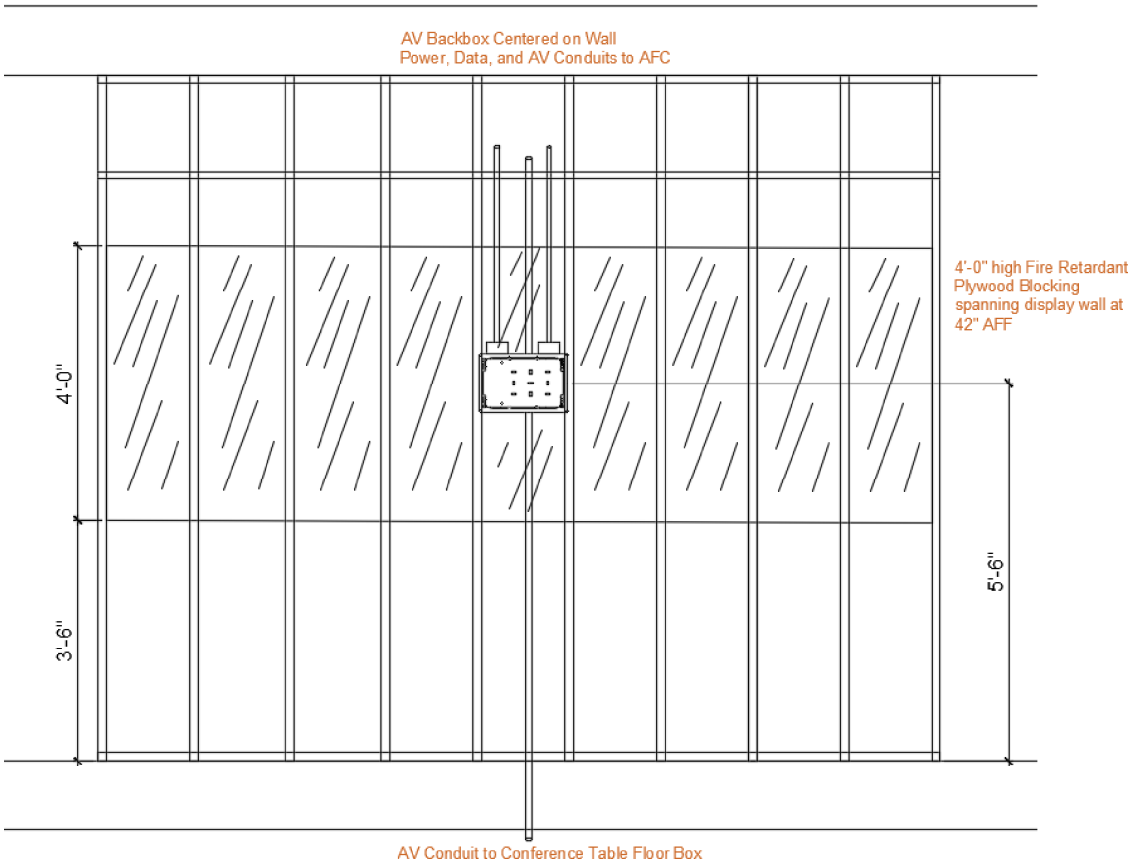
Each box will require (1) 1" conduit with pull string in the top of the box between the power and data to above finished ceiling.

Each box in an AV1 system will require (1) 1" conduit with pull string in the bottom of the box to the floor box below the conference room table.

Chief PAC525FCW In-Wall Storage Box with Flange and Cover (White)

6.1.2 Fire Retardant Treated Plywood Blocking

AV1 and AV3 System display walls shall require fire retardant treated plywood blocking. Blocking material shall be compliant with NFPA 5000 Building Construction and Safety Code, NFPA 101 Life Safety Code, and NFPA 703 Standard for Fire Retardant – Treated Wood and Fire-Retardant Coatings for Building Materials. Plywood blocking for AV1 and AV3 systems should installed in a 4'-0" high strip mounted with the bottom at 3'6" and should span the entire wall. Plywood blocking for the AV2 system will be specified in the AV coordination drawings provided for each project.



AV1 Plywood Blocking Elevation Typical

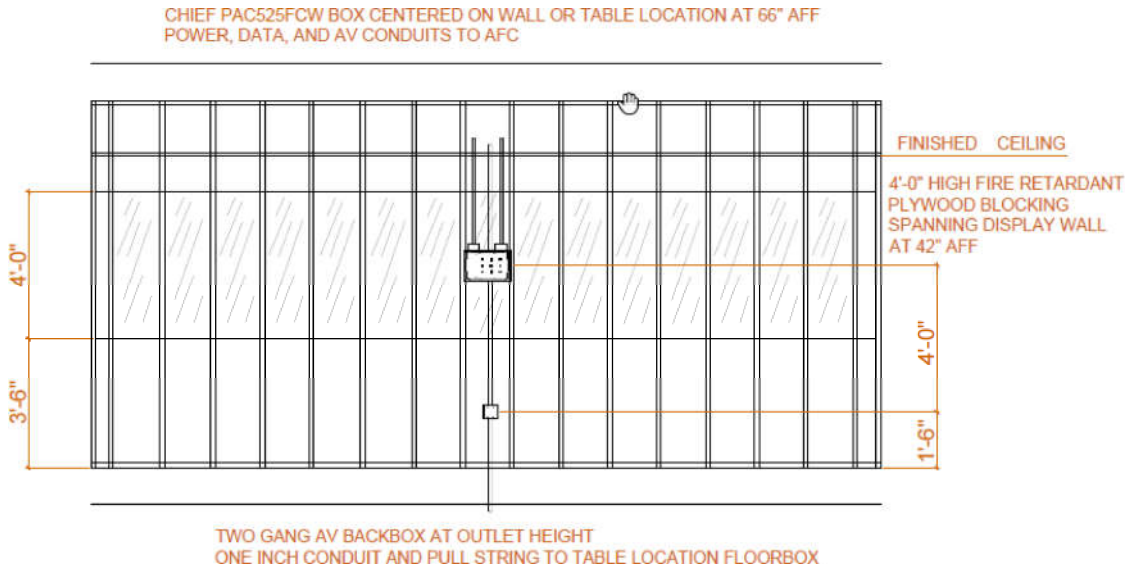
6.1.3 AV Conduit

Unless otherwise specified AV conduit size shall be minimum 1.0" electrical metallic tube (EMT) conduit. Pull string shall be provided in each conduit. Conduits shall terminate above finished ceiling in the conference room or meeting space. In the In ceilings with soffit or hard cap treatments around the perimeter; conduit will terminate above the accessible portion of finished ceiling.

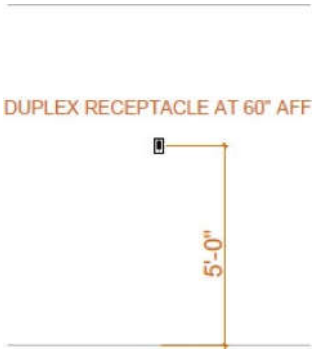
6.2 AV1 Conference Room / Large Training Room

Infrastructure Required for AV1

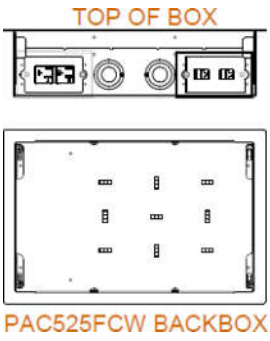
Front of Room



Back of Room

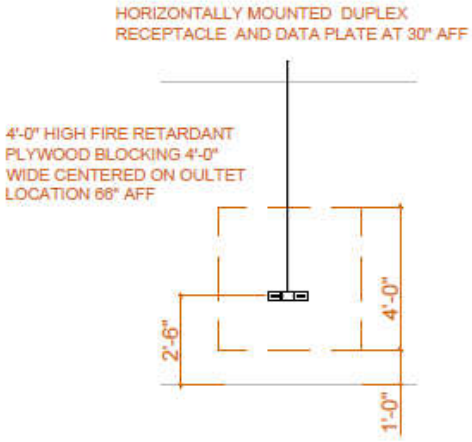


AV Box Detail

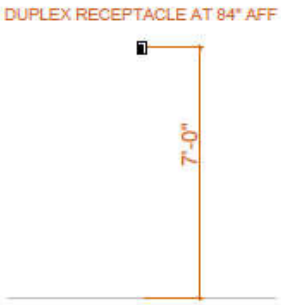


6.2 AV2 Naturalization Ceremony Room / Large Conference Room

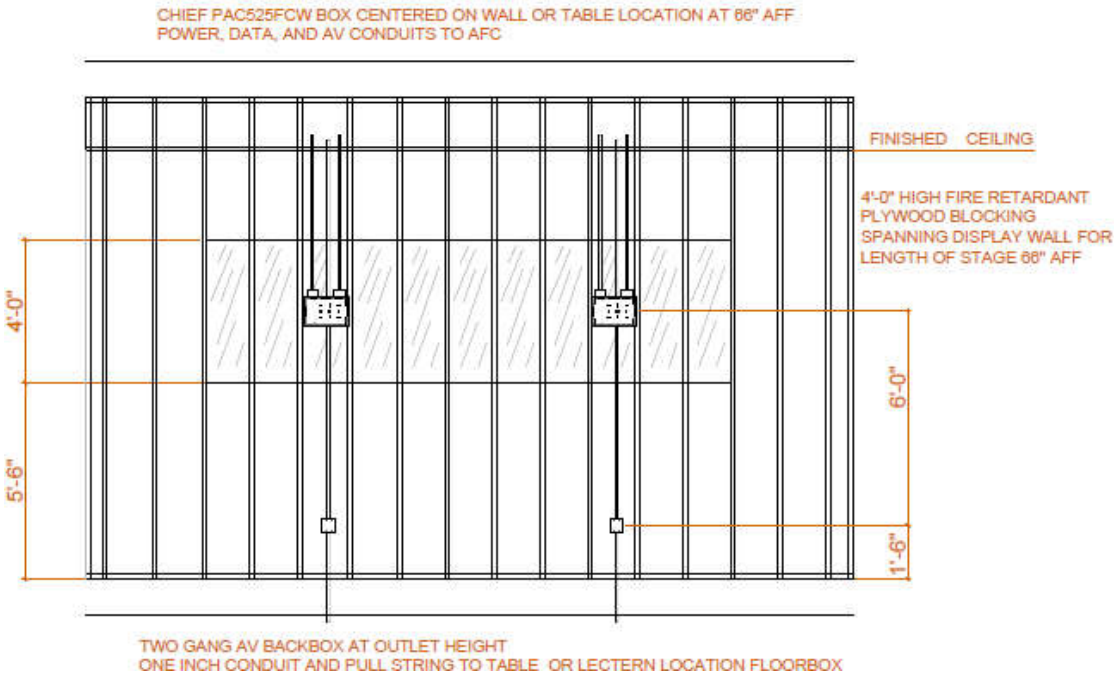
AV Closet Infrastructure



Back of Room

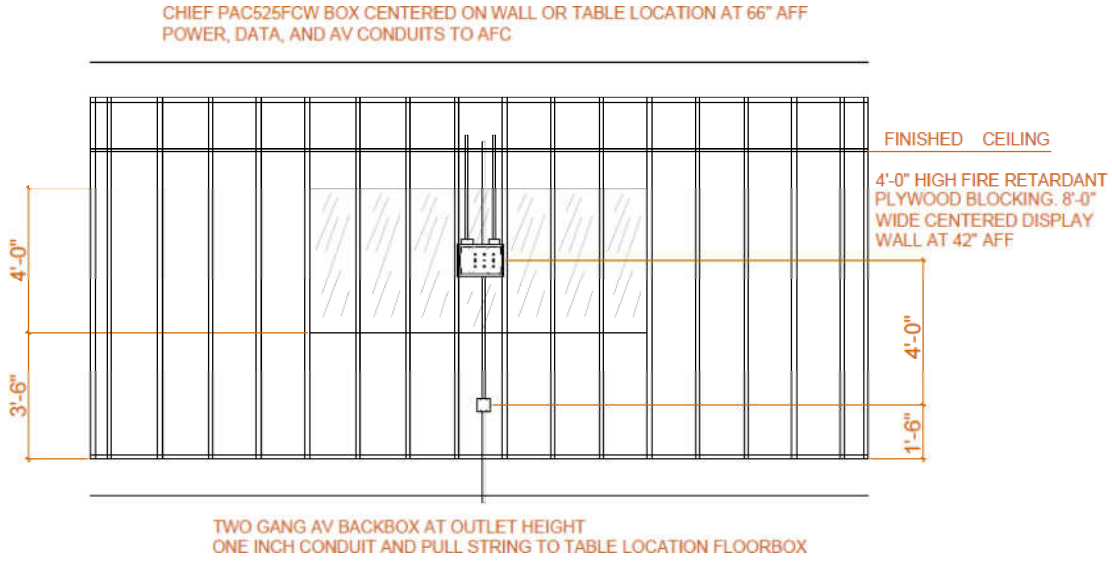


Stage Wall Infrastructure



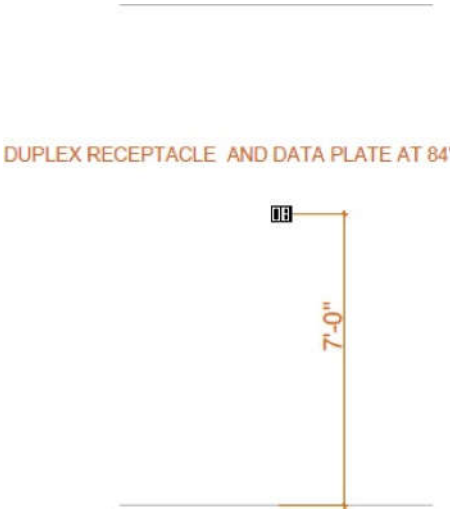
6.3 AV3 Training Room

Display Wall



6.4 AV5 Digital Signage Display System

Display Wall



U.S. Citizenship and Immigration Services

Facility Security Specific Requirements

Office of Security and Integrity

in collaboration with

Office of Facilities Project Management Branch

November 2017

Version 4.0

Table of Contents

1.0 Purpose

The purpose of this document is to provide the Lessor with the USCIS Security Requirements for hardware, software, devices, components and related items that are expected by the U.S. Citizenship and Immigration Services (USCIS).

This document includes general descriptions and specifications for security requirements for USCIS space. In conjunction with the GSA's Request for Lease Proposal (RLP), this document will assist the Lessor in understanding and developing the site specific security requirements and detailed costing required for the offered space.

The intentions of this document are the following:

- Accommodate the functional requirements of present and future security systems.
- Support a multi-product and multi-vendor environment
- Facilitate the planning and installation of security systems that will support the diverse needs of various building locations.
- Ensure uniformity and consistency in the security measures provided in all USCIS facilities.

2.0 Site Security

2.1 Illumination of Entrances, Exits, Parking Lots, and Garage Security:

The type of lighting and positioning selected will not impede the visibility/quality of video surveillance cameras.

2.2 Visitor Access Control Parking:

Visitor parking will be clearly defined using visitor signs. If adjacent building parking is provided, it will be reserved for disabled parking and Government parking. (See 2.4).

2.3 Application of Barriers:

If applicable, barriers will be required as part of the Preliminary Facility Security Level (FSL) determination by USCIS Office of Security and Integrity. Barriers used will be K-4 rated or higher. Barriers can be bollards, planters, drop arm gates or combination thereof. Barrier installation will be in accordance with manufacturer's specification. Decorative sleeves, soil, plants etc. will be included to maintain aesthetics and as to not detract from neighboring areas.

2.4 Authorized GOV Parking:

If adjacent building parking is provided, a section of this area will be reserved for Government Official Vehicles (GOV) parking only. GOV areas will be clearly defined using "Reserved" signs. GOV's parking will be well illuminated and covered by video surveillance.

3.0 Structure Security

3.1 Blast Resistance Windows:

All USCIS space exterior windows will have fragmentation film applied in accordance the GSA RLP.

3.2 Security of Ventilation Equipment and Controls:

All access to HVAC equipment that provides fresh air to USCIS spaces is to be secured from unauthorized access.

3.3 Emergency Generators:

If generator is required, emergency generators will be fenced within a secured access gate. Bollards will be positioned to reduce damage from vehicles. Electronic Security Systems shall be tied to generator for continued power.

4.0 Facility Entrance Security

4.1 Employee/Visitor Access Control

Magnetometers and X-rays - The government will procure and maintain magnetometers and X-rays.

Guards - The government will procure and post armed guards. The number of guards will depend on a guard survey conducted by local the Field Security Manager.

4.2 Perimeter Doors and Door Locks

Key Controls and Access Media - The lessor will use construction cores to secure required space during construction. Construction cores are required on exterior doors to secure the site until acceptance of the facility. Upon substantial completion and acceptance of the space, the locksmith (under supervision of a designated USCIS representative) will change out construction cores and install all permanent cores. At no time will the locksmith be in possession of the keys for the permanent cores. GSA will receive, sign for and turn over to USCIS the permanent core keys.

Mechanical Lock Specifications - Locksets will be installed on all non-passage set doors as follows:

- Storeroom function locks and hardware are required for all doors receiving card readers. These locksets/hardware have a lever on both sides, but the outside is stationary and cannot be moved. From the outside, the door latch is operated with a key. On the inside, simply engaging the lever will retract the latch. (For doors with panic hardware and/or magnetic locksets, see section 4.5 of this document.)
- Lockset will be high security, tamper resistant, commercial grade mortise lockset with storeroom function lock.
- Lockset will be on master key system.

- The contractor will provide and install a wall mounted organized lockable key box to accommodate all required keys to USCIS space.
- Lockset will be 6 pin cores.
- Locksets will be interchangeable cores and contractor will provide core removal key.
- A key plan developed with coordination from USCIS displaying key cut codes, pin codes, key numbers and their corresponding door access will be provided by the contractor. (The number of keys required will be determined during the key plan development.)
- A knox box may be required by local code or by USCIS guidance to secure an access device, i.e., key or access card, to expedite Fire Department entry. If required, a tamper switch alarm will be installed.

4.3 Hydraulic Door Closers (HDC):

Door closer will be commercial/industrial grade.

Door closing hardware is required for all doors with card reader equipment installed.

4.4 Electric Door Strike (ES) Specifications:

Commercial grade strikes are required.

Electric Door Strikes will be installed on doors with card readers.

Electric Door Strikes will be set at Fail Secure.

Electric door strikes will be powered by dedicated DC power in accordance with manufacturer's specifications.

4.5 High Security Magnetic Locksets

Only use magnetic locksets on double doors that are glass, with or without framing, and do not have astragal (center piece). The use of electrified vertical rods is not acceptable.

Locks will be mounted/installed in accordance with security industry standard as well as federal, state, local, and ADA laws.

Locks will be powered with dedicated DC power.

A push button request to exit button or touch sensitive panic bar with built-in request to exit will be installed on the egress side to deactivate the magnetic field for exit. Request to Exit (REX) device will be dependent on the door type and location.

Magnetic locking devices without built-in suppression and/or magnetic locking devices that draw large amounts of current (typically older models or defective devices) shall be installed utilizing external isolation relay(s) to protect the system from the transients these magnetic locking devices can generate, to ensure reliable operation.

Battery uninterrupted power supply will be supplied and support 4 hours.

For Main Entrance visitor doors, a toggle switch accessible on interior above door will be provided to disable magnetic locks during business hours.

Doors equipped with magnetic locksets will also have mechanical vertical locksets that can be actuated with panic hardware, locked in open position by locking down panic bar with hex key and either secured or unlocked using a mechanical lockset and key from exterior. (See mechanical lockset requirements)

4.6 Emergency Exit Doors/Delayed Egress:

Delayed egress will function in accordance with local fire and safety codes. The delay will be set on a timer, time determined by local fire codes. The panic hardware will prevent exit until the timer releases the lockset. The opening of the door will annunciate an audible local alarm that can only be reset by key. Key for alarm will be provided to USCIS.

High Rise Specific Requirements

International Building Code 2014 requires that all emergency egress doors to stairwells require that the doors fail safe in the event of a fire alarm activation or power outage. If this requirement applies, additional alarm points (motion sensors, glass break detectors, and door contact points) will be required to protect sensitive areas.

4.7 Door Hardware Schedule:

Door hardware for all doors will be listed in the USCIS Specific Requirements.

5.0 Security Systems

The Lessor will furnish and install an operational Electronic Security System (ESS). This requires the three (3) components of the ESS: Access Control System (ACS), Intrusion Detection System (IDS), Internet Protocol Video Surveillance System (IPVSS) that will be capable of operating on an integrated standalone platform which can provide USCIS with the ability access, monitor, administer and control of all three systems through a single client.

5.1 ESS Network Infrastructure Requirements

Server/Rack/KMM/Power:

Lessor shall supply system server which exceeds minimum server build specs of USCIS standard. The servers shall be a Dell PowerEdge R730. Servers will be rack mountable and located in LAN room. Server shall be provided by Lessor according to the model number and build specifications contained in Attachment 2.The servers will come preconfigured with Gallagher software for operating and managing the ACS as required; including Gallagher Command Center software, Credential Registration Engine, and certification validation software for ACS as required.

a. The specifications include the following:

i. Redundant power supply.
ii. Independent remote management processor.
iii. Rails for rack installation.
iv. Hard drives replaced under warranty will not be returned to the vendor; the Government will destroy or dispose of these based on the sensitivity level of the system which they are removed.
v. Operating Systems shall be Windows Server 2012 R2.

KMM Switch:

A Dell™ 1U rackmount LED console model number: FPM185 is required and will be mounted in the rack.

Rack Specifications:

The rack will be a full 4 post APC NetShelter, 42U cabinet or equivalent with lockable doors for the security equipment along with grounding to meet manufacturer's requirements.

Workstations (WS):

Security Installer shall supply system workstations which exceed minimum server build Specs of USCIS standard, and Workstation OS shall be Windows 7 Enterprise.

The Security Installer shall provide two workstations used for this project as follows:

a. One workstation (PIV Provisioning WS) will be installed in the security office for administrative management of the systems. Manufacturer part number 50-1302 Dell Optiplex 7040 with Morpho USB Enrolment Reader, Cherry keyboard/reader, Gallagher native Credential Registration Engine Client software installed, 240-watt power supply, 128-GB Sata class 20 SSD hard drive, Windows 7 Pro, and one USB mouse. Provide a Dell U2412M HD 30" Monitor; manufacturer part number 415-40-U2412M for PIV Provisioning WS. This Workstation shall be able to view camera video and burn video to a DVD Disk.

b. One workstation (Guard WS) will be located at the guard station for camera and visitor management. Manufacturer part number 50-40-Optiplus Dell Precision Tower, 256-GB Sata class 20 SSD, Dual AMD Fire Pro W5100 4-GB video cards, Windows 7 Pro, and one USB mouse. Provide two (2) Dell U2412M HD 30-inch monitors; manufacturer part number 415-40-U2913WM for the Guard WS.

c. General Equipment Specifications purchased separately from Workstations:

   i. An 8 outlet Surge Protector and battery backup workstation unit for each workstation.

   ii. One video joystick controller (Guard WS only) for controlling Pan Tilt Zoom camera functions and other viewing functions.

Cabling:

a. Each Gallagher 6000 HI SPEC PIV Controller shall receive two CAT6A network cables to be terminated between the onboard dual Ethernet ports of the 6000 and the network switch for redundancy.
b. Install and terminate the required Category 6A horizontal plenum cables (gray color) on a 24- or 48-port performance-compliant Cat 6A – 1U or 2U patch panel in each USCIS Main Distribution Frame (MDF) / Computer Room in the designated cabinet provided by the security vendor. Coordinate with IT on the designated location within the MDF / Computer Room as noted on the provided layout drawing within the space.
c. Provided manufacturer specific Category 6A patch cables that shall be used for cross-connect from network switch to the 24- or 48-port patch panel ports and at the device location with the required lengths.

d. All plenum horizontal cabling routed through ceiling space that are not supported in wire mesh, basket style tray will be supported by J-hooks staggered approximately within 4 feet on center (maximum distance of 5-foot spacing).
e. Category 6A horizontal cables shall be labeled with the designated cable number at the termination points at the backside of patch panel in the corresponding closet and the surface box at the drop location (mounted inside the provided lockable security enclosure).
f. Machine-printed labels are mandatory, and hand written or permanent marker is not acceptable. Labeling is also required for the front of the patch panels and 1-port surface boxes with identification.
g. Tie wraps shall not be used. USCIS will only accept Velcro.
h. Terminate Category 6A horizontal cables on patch panels and modular connectors/jacks in surface mount housings to meet manufacturer's requirements. (Do NOT allow pairs to untwist, and outer jacket should only be ½ inch from termination point).
i. Route cables from both sides of equipment rack when terminating on patch panels with separation down center of rack, and use wire management, supporting bars, etc.
j. (Category 6A plenum CMP, cable specification or equivalent: Berk-Tek LANMARK 10G2 part # 10137183 or equiv. (gray color), Cat 6A Leviton patch panels # 6A586-U24 or equiv. or # 6A586-U48 or equiv., Cat 6A gray jacks with shutter – Leviton # 6AUJK-SG6 or equiv., surface mounting housing, 2-port box assembly Leviton # 4S089-1IP or equiv., and 3-foot gray Leviton # 6AS10-03S patch cables or equiv.)
k. A composite plenum-CMP rated access control cable is required for each door location. Cable shall be Belden Part Number 638AFS composite for lock power, card reader, door contact, and request to exit. Cable will consist of banana peel plenum with the following conductors: 4-16 AWG stranded conductors, 3-18 AWG pairs, 4-18 AWG stranded conductors, and 2-18 AWG stranded conductors.
l. Security Installer shall provide and install to provide necessary connections and power sources to the reader, lock, door position switch, and request to exit throughout the facility.
m. Power sources to the reader, lock, and other door devices throughout the facility will originate from the MDF / Computer Room where the security cabinet and components will reside. Power supplies or 120-volt (V) electrical outlets shall NOT be located above door locations for design.
***NOTE** : All cabling shall be installed according to the Gallagher Technical Reference Manual and shall follow all USCIS cabling standards as defined herein. Any conflict between Gallagher TRM and USCIS standards shall be brought to the attention of COTR for final determination prior to installation. Power requirements must be calculated by Security Installer. Proper cable gauge shall be selected based on reader distance from 6000 controller and must be calculated using appropriate load calculations provided by the PACS*

manufacturer. Discrepancies between specified cable and power requirements shall be brought to the attention of USCIS PM.

n. Separation must be maintained with a minimum of 2 inches between the IT cable plant installation (All Cat 6A and Cat 6 cables) and the security multi-conductor cabling (for power, signal, etc. (e.g., AWG 18/6, 22/2) throughout the facility. The Cat 6A cable for security may route with IT cable plant, which is Cat 6 – gray color, within the basket tray system.

o. The security multi-conductor cables may be routed within the same basket tray if the sizing accommodates, but must maintain the minimum of 2 inches of separation and be coordinated with the IT cabling contractor, with the IT cable plant installation taking precedence.

p. All multi-conductor security cables for the system must also be installed in separate supporting hardware (j-hooks) and upon exiting the basket tray system as well. All security cabling shall be CMP plenum-rated for all applications with the exception of cabling completely routed in rigid metallic raceway, EMT.

q. The Cat 6A – IT cabling shall NOT be routed within the same conduit as multi-conductor security cables used for power, signal, etc. If shielded, multi-conductor security cables and bundled assemblies must be bonded to meet NEC requirements accordingly. Refer to the USCIS Structured Cable Plant Standard, V2.2, March 2016 to meet the requirements for the IT and security cable installation.

USCIS Cable and Labeling Standards, Requirements, and Guidelines:

a. USCIS strictly adheres to the following standards. No deviations will be accepted.

b. Cat 6A shielded cable will not be accepted.

c. A Fluke Level 5 or higher cable tester must be used to certify the complete cable plant installation. Permanent Link Test required for Category 6A certification. Fluke Linkware format (.flw) required for technical deliverables package.

d. The manufacturer of the conductivity/termination hardware is responsible for supporting the single-source warranty of the complete cable plant installation. The selected contractor is required to be a certified installer with trained technicians of the proposedmanufacturer's product. The proposed cable plant solution must meet the minimum 15-year application assurance warranty to include product, cable, etc. and labor for the provided installation.

e. Each of the Category 6A horizontal cables shall be labeled with the designated cable number at the termination points located at the backside of patch panel in thecorresponding closet and at the drop location on the single port box. Machine-printed labels are mandatory, and hand-written or permanent marker is not acceptable. Labeling is also required for the front of the patch panels and faceplates, which will also be provided for identification.

f. Terminate Category 6 horizontal cables on patch panels and modular outlets to meet manufacturer's requirements. (Do NOT allow pairs to untwist, and outer jacket should only be a ½ inch from termination point). Route cables from both sides of equipment rack when terminating on patch panels with separation down center of rack, and use wire management, supporting bars, etc.

Cable labeling requirements:

a. All cables must be machine labeled; no hand-written labels will be accepted.
b. USCIS naming conventions shall be followed. Alternative naming conventions will not be accepted.
c. These naming conventions shall be used throughout the system architecture, reflected on submittals and as-built documentation, and when programming or configuring Gallagher Command Center database objects.
d. Security Installer is required to label each cable at the back of the patch panel and as close as possible to the terminating point in the controller. Labels shall also be placed at each end of each device. Additionally, all controller Ethernet connection are required to be labeled at each end of the device location and at the front of patch cable. All Cat6A cables shall meet the following standards and naming conventions:

i. Controller to Network

- Cat 6A cable-Patch Panel to Gallagher 6000-PIV controller: Each 6000 controller shall have two Ethernet cables terminated between controller and the patch panel to provide redundant communications between the controller and the production network. The following naming convention shall be used for all controller-to-network or controller-to-patch-panel connections.
- Three-letter building identification-the floor number that the wire closet is located on- the wire closet and type (MDF, TR1,TR2) – security panel number – Ethernet connection A (primary), B (secondary).

❖ Examples:
  - Panel 1 cable A Example: COH-2-MDF-1A
  - Panel 1 cable B Example: COH-2-MDF-1B
  - Panel 2 cable A Example: COH-2-MDF-2A
  - Panel 2 Cable B example: COH-2-MDF-2B

ii. Patch Panel to PTZ Camera (PTZ)

- Mounted in single port box- Cat 6A cable.
- Three-letter building identification-the floor number that the wire closet is located on- the wire closet and type (MDF, TR1,TR2) – PTZ camera number.

❖ Examples:
  - PTZ camera #1, wired to TR1 closet, 4th floor example: COH-4-TR1-PTZ1.
  - PTZ camera #3, wired to MDF closet, 2nd floor example: COH-2-MDF-PTZ3.

iii. Patch Panel to Fixed Camera (FC)

- Mounted in single port box – Cat 6A cable.
- Three-letter building identification-the floor number that the wire closet is located on – the wire closet and type (MDF, TR1,TR2) – FC Camera number.

  ❖ Examples:
  - FC camera #1, wired to TR1 closet, 4th floor example: COH-4-TR1-FC1.
  - FC camera #3, wired to MDF closet, 2nd floor example: COH-2-MDF-FC3

iv. Security Controller to Each Door

- Specialty cable (as specified in technical requirements)
- Three-letter building identification-floor the wire closet is located on – the wire closet and type (MDF, TR1,TR2) – security panel# –cable number.

  ❖ Examples:
  - Door #1, wired to security controller #1, located in MDF
  - closet, 4th floor example: COH-4-MDF-SC1-1.
  - Door #9, wired to security controller #2, located in MDF
  - closet, 4th floor example: COH-4-MDF-SC2-9.

v. Patch panel to Aiphone (AP)

- Mounted in single port box – Cat 6A cable.
- Three-letter building identification – floor the wire closet is located on-the wire closet and type (MDF, TR1,TR2) – AP camera number.

  ❖ Examples:
  - Aiphone #1, wired to TR1 closet, 4th floor example: COH-4-TR1-AI1.
  - Aiphone #3, wired to MDF closet, 2nd floor example: COH-2-MDF-AI3

vi. Remaining Cables All remaining cables that are not required to be punched down to the patch panel (e.g., those terminating at a field sensor or device such as motion detectors, request to exit, keypads, glass breaks, door contacts, etc.) require the use of a combination of an agreed-upon abbreviation and the number the cable. USCIS will require machine-generated labeling on both ends of the cable.

  ❖ Examples:
  - Glass Break: GB1,GB2,GB3,GB4,GB5
  - Key Pad: KP1,KP2,KP3,

- Door Contact: DC1,DC2,DC3,DC4
- Motion Detector: MD1,MD2,MD3,MD4

Network Switches:

1. The ESS infrastructure requires Cisco Catalyst 3850-X Series Power over Ethernet (PoE) switches.
2. The port security on the Cisco switches and those they interconnect with cannot be extended to other vendor switches.
3. Contractor will configure devices using USCIS provided IP addresses.
4. Switches will be mounted in security rack located in the USCIS LAN room and wire closets.
5. Contractor will supply enough switches to provide ports for all cameras, panels, intercom devices, servers and workstations. Note: Switches will be required on each floor for vertical connectivity to head end.

Battery Backup/Power Supplies:

1. Controller and UPS enclosures shall be ordered from Gallagher, referencing the acceptable part numbers listed below. Enclosure shall include power supply and UPS battery backup system which shall be wall mountable Life Safety Power units able to monitor the health status of power supply and batteries.

    a. C305720, LSP E2 Cabinet, 6A PSU (Third-Party Product)
    b. C305721, LSP E4 Cabinet, 12A PSU (Third-Party Product)
    c. C305740, LSP B100 Secondary Voltage Module
    d. C305741, LSP C8 Lock Controller Module, 8 Output
    e. C305742, LSP NL2 Power Netlink Module

2. Battery backup shall support all devices connected for the times noted below for each system.
3. The system shall include UPS backup power with low-voltage power supply monitoring and alarm notification for the following.

    a. Monitor health and status of host power supply and battery set
    b. Auto-schedule or manual test and report battery standby time
    c. Remote supervision of battery's state of charge
    d. Remote monitoring and alert of external temperature fluctuations
    e. Monitoring of internal cabinet temperature Remote power cycling control of external equipment
    f. Time / date stamp system log reports of last 1,000 events
    g. Security Installer shall supply power, UPS, and load calculations to the USCIS PM prior to commencing installation.

5.2 Physical Access Control Systems (PACS)

PACS Specifications:

The following specifications provide functional, technical, and operational requirements for the Gallagher Command Center PIV PACS.

1. The ACS system will be Gallagher PIV ACS. The system will have GSA E-PACS certification using 13.01 topology.

    a. PIV Command Centre (APL Listing 10019)
    b. PIV PACS Validation (APL Listing 10020)
    c. T10 PIV Reader (APL Listing 10021)
    d. T11 PIV Reader (APL Listing 10022)
    e. T11 PIV Reader MultiTech (APL Listing 10023)
    f. T15 PIV Reader (APL Listing 10101)
    g. T15 PIV Reader MultiTech (APL Listing 10102)
    h. T20 PIV Reader (APL Listing 10038)
    i. T20 PIV Reader MultiTech(APL Listing 10039)
    j. T21 PIV Reader (APL Listing 10099)
    k. T21 PIV Reader MultiTech(APL Listing 10100)

2. The Security Installer must be certified by the manufacturer for the security system and will provide the certification to USCIS. GSA will ensure that the Security Installer selected is an HSPD-12 certified provider.
3. Standardized naming conventions: Security Installer shall follow all government provided naming conventions and standardized nomenclature when performing system configuration and database programming. Naming conventions will be provided to Security Installer by the Government prior to Security Installer commencing these activities.
4. Database and event storage capacities may vary based upon the system configuration. The ACS shall be capable of storing a minimum of one million records of system activity.
5. Records management on the ACS database shall automatically truncate or “roll-over” when the maximum record capacity has been reached so that space is always available to save the most recent transaction data in the system.
6. Security Installer is to install in accordance with ALL manufacturer's current specifications for installations, along with having all up-to-date manufactures installations guides and specifications prior to install.
7. The Security Installer will provide to GSA/USCIS shop drawings, product data, material list, and/or cut sheets on all devices, systems, and/or components that are to be provided under these requirements. USCIS will review and provide comments on provided information.
8. The Security Installer will pay close attention to the USCIS specific requirements for each room and/or space within the USCIS-controlled space.
9. If applicable, intercoms for remote access into parking areas and/or common entrances not staffed by USCIS guards will be required.
10. The Lessor is responsible for the required coordination between the installer of the ACS system, all door hardware, electrical power requirements, and all other trades involved in the project.

11. The Security Installer will provide enough battery backup power to support 90 minutes of continuous power to ACS in case of power loss.
12. All wiring, terminations, power, and grounding installations must be performed in accordance with and consistent with current manufacturer component installation diagrams and recommendations.
13. PoE will NOT be utilized as a power source for the access control system.

PACS Summary:

1. The PACS shall provide FIPS 201-2 – compliant access control functionality and shall have the capability of being integrated with video surveillance (i.e., IPVSS requirements below), intrusion detection, building automation systems, fire alarm system, lighting controls, elevators, and other perimeter security countermeasures and systems where applicable.
2. The PACS shall consist of an end-to-end solution listed on the FIPS 201-2 / FICAM Testing Program Approved Products List.
3. All relevant systems shall be integrated for detecting, delaying, and deterring unauthorized individuals from entering protected facilities while providing access to authorized personnel.
4. Installers/integrators shall use existing PACS cabling infrastructure where such cabling conforms to current Institute of Electrical and Electronics Engineers / Building Component Safety Information standards, passes current applicable industry standard testing, and sufficiently supports the needs of the system.

    a. Monitoring: The solution shall provide uninterrupted (24x7x365) monitoring of the PACS devices.
    b. Availability: The solution must have a demonstrated availability of 99%, over the past three years of service from the date of submission of the proposal.
    c. The primary system must be internally redundant so that there is no single point of failure within the system.
    d. The primary system shall remain fully functional while being upgraded or backed up.
    e. Disaster Recovery: The architecture must also support a geographically remote disaster recovery facility with a full copy of all applications, synchronized databases, and the immediate ability to take over data processing operations in the event of a catastrophic failure at the primary facility. Failover and synchronization with a disaster recovery server must occur immediately and seamlessly for either manmade or natural disaster. Should the events be precipitated by technical issues, a decision to failover and recommence synchronization must be made and implemented within 90 minutes from the time of the occurrence.
    f. Open Architecture: The central PACS applications shall be capable of supporting multiple security manufacturers' on-premise control panels, edge devices, cameras, sensors, etc. through a published API.
    g. Must appear on the FIPS 201-2 / FICAM Testing Program APL as an end-to end PACS solution. Security Installer's solution may be in testing by

the Program. Security Installer shall not be allowed to install the system until it is approved and listed on the APL.

5.2.1 General Description of Installation and Capabilites

All perimeter doors will use the Gallagher HBUS Terminal series keypad readers for the ability of dual-factor authentication after hours. Secondary doors (interior) will be installed with HBUS series PIV readers. Electronic locking hardware will be installed on all pedestrian door entrances with a card reader. All locking arrangements installed on any means of egress (i.e., the exit access, the exit, and exit discharge) door assembly or fire-rated door assembly must meet the requirements of the NFPA Life Safety Code and NFPA 80, Standard for Fire Doors and Other Opening Protectives (if applicable). In addition, preparation of fire door assemblies for locks, latches, hinges, remotely operated or remotely monitored hardware, etc. must be performed in accordance with the manufacturer's inspection service procedure and under label service (Annex E and Annex F of NFPA 80, Standard for Fire Doors and Other Opening Protectives).

Card Readers (CR):

1. CR with pin pads and LCD display will be installed on all USCIS doors as depicted on floor plans.
2. Gallagher T Series (T-21 PIV Multi-Tech) readers are required and will use FICAM and FIPS-201-2–compliant firmware able to read all federally issued PIV, CAC, FRAC, PIV-I, TWIC and CIV cards. Readers for project shall be all by one manufacturer or the other, not a mixed batch at a single site. Configuration will allow for the cards to be read contactless at 13.56 MHZ or using the contact card read interface.
3. Card readers shall be surface mounted near door located in a position to meet federal,state, local and Americans with Disabilities Act (ACT) laws.
4. CR will indicate access granted when the access control system has released an electricstrike or magnetic locking device as applicable to allow access into the secured space.

Request to Exit Sensors (REX):

1. The ACS will utilize Passive Infrared (PIR) Request to Exit (REX) sensors to indicate an authorized exiting/opening of doors from egress side. REX devices are required on all doors receiving card readers.
2. These devices will provide notification of an authorized exit locally to the access control log and will not tie into the IDS.
3. Bosch DS160, Honeywell IS310, or equal required.
4. The sensor will be located on the egress side of the doors to detect an occupant approaching the door.
5. REX devices will not release electric strikes. Electric door strikes will solely be controlled by the access control system relays when an authorized card read is granted.
6. Push button REX devices or pressure sensitive REX panic hardware devices are required for doors with Magnetic locksets.

Door Position Switches (DPS):

1. The vendor will provide and install magnetic mounted door position switches to monitor all card reader controlled doors. (Exception: Doors required to have a high security Balanced Magnetic Switch (BMS) that are equipped with two outputs.)
2. Sentrol 1078 or equal is required.
3. Door position switches will monitor for door propping, forced door alarms, and open or closed status. This monitoring is to be leveraged locally using the ACS client workstation.

5.3 Intrusion Detection Systems (IDS)

IDS Requirements:

1. IDS is required for all perimeter access, ground floor windows , and any other windows with direct access from adjacent rooftops, and roof hatches into USCIS space. IDS will include Federal Protective Services (FPS) Mega-Center approved alarm panels, passive infrared (PIR) dual technology sensors, balance magnetic switches, duress alarms, glass break sensors, dual technology motion detection sensors and tamper alarms (panel and sensors). The IDS keypad(s) (arm/disarm control) must also be located near the entrance employees utilize.

2. All sensors will be individually zoned in such a way that the alarm location can be easily located through the use of simple zone maps by responding forces. The daisy chaining of sensors, alarms or zones is prohibited for this reason.

3. Zoning needs to be established that allows individual areas to be disarmed for afterhours use, i.e. the interior alarms could be disarmed for afterhours use but the perimeter alarms would remain armed. Zoning requirements will be determined by FPS Mega-Center.

4. Alarm messaging language will meet the FPS Mega-Center Monitoring Station requirements.

5. Lessor will provide enough battery backup power to support 4 hours of continuous power to intrusion detection equipment in the event of power loss.

IDS Panel (IDSP):

1. The IDS Panel will be connected to the FPS Mega-Center servicing the area for alarm monitoring **via an analog "POTS" (Plain Old Telephone System) land line**. The Lessor will be responsible for providing the analog telephone line (POTS) for the required communication to the Government's alarm answering service. The Lessor will pay for and maintain this line for the term of the lease.
2. Connection to the Mega-Center requires the use of panels from the following manufacturers; Bosch (Model: D9412G-V4) or Digital Monitoring Products (DMP) XR500 Alarm Panel. Models need to be verified with the Mega-Center due changes in technology.

3. Mega-Center Alarm Requirements (MAR) Request Form is required to be completed and approved by FPS prior to connecting. Portions of the MAR are required to be completed by the lessor, security vendor and will be coordinated with USCIS.
4. Alarm systems will be configured for manual arming/disarming unless otherwise specified by USCIS.

High Security Balanced Magnetic Switches (BMS):

1. To be installed on all doors leading into USCIS space from outside or doors leading from common shared tenant space areas.
2. Harco Magnasphere HSS L2C or equal required.
3. BMS will act as an alarm to the IDS when armed and provide door status notifications to ACS.
4. Switches will be housed in weatherproof enclosures when exposed to outside elements.
5. Switches will have a tamper alarm notification.
6. Surface mounted switches may be used at the approval of USCIS.

Acoustic Glass Break (GB) Sensors:

1. All glass on the ground floor will be in the coverage area of a glass break sensor. All sensors will be acoustic detection devices). Once the glass break detects the acoustic activity, it will send a signal to the alarm panel.
2. Glass break sensors will be commercial grade and be equipped false alarm reduction technology.
3. Glass break sensors will be ceiling mounted devices.
4. Contractor will provide a glass break testing device matching devices installed.
5. Glass break sensors will provide detection of plate, safety, laminated, and tempered glass breakage.

Dual Technology Motion Sensors (MS):

1. Motion sensors will cover main hallways leading to exterior exits. Dual technology consists of PIR and microwave detection technology integrated into a single enclosure.
2. The Rokonet directional and 360 series or equal required.
3. Motion sensor will be on different microwave frequencies when positioned in same area.
4. Motion sensors will not be mounted on or near pipes, steel girders, or HVAC systems as doing so may result in nuisance alarms. Fans, venetian blinds, open windows may also produce false alarms.
5. Optional: 360 degree ceiling mounted dual technology motion sensors may be used for large areas or where the use of directional sensors are not feasible.

Hardwire Duress Alarm Button (DB):

1. Duress alarms are for use in public facing facilities at guard stations, Field Office Director (FOD) Office, District Director (DD) Office, and information counters. Information counters, FOD and DD duress alarms will annunciate to the USCIS guard visitor screening station. Duress alarms shall annunciate at the guards desk via

audible and visual notification. The guard visitor screening station duress button will annunciate to the Mega-Center. If the facility does not have guard service, all duress alarms will annunciate to the Mega-Center. All other offices have the ability to call guard desk through 911 services and speed dial.

2. Duress alarms will be desk mounted, recessed, and out of sight from the general public, visitors, and customers. The duress alarm will be positioned within arm's reach of the user when seated at their respective desk/stations.
3. Duress alarms will lock-in alarm mode until manually reset by key or similar device.
4. Duress alarm annunciations will be distinguishable from other alarm sensors.

Alarm Keypad (KP):

1. A Bosch D1260B keypad or equivalent shall be used. Keypads will be mounted inside secured space near main entrances, employee entrances and guards desk. Keypads are to be located in a position to meet federal, state, local, and ADA laws. The alarm delay will be set at minimum 30 seconds and maximum of 60 seconds. Keypad alarms locations will be clearly indicated on construction documents. Quantity of keypads will depend on number of partitions, floors, zones, etc.

5.4 Internet Protocol Video Surveillance Systems (IPVSS):

IPVSS Requirements:

1. Video system shall be based on Milestone Video System with Axis cameras. Lessor shall verify that all video components are compatible with current version of Gallagher Command Center and shall provide all necessary integration licenses to provide full interoperability between PACS and IPVSS.
2. The IPVSS system coverage is required to provide complete 360 degree coverage and quality video coverage of all exterior perimeters controlled by USCIS, visitor and employee entrances into USCIS space, security screening areas, waiting areas, naturalization ceremony rooms and information counters.
3. Lessor will provide enough battery backup power to support 90 minutes of continuous power to IPVSS in the event of power loss.
4. The determination of fixed cameras, pan/tilt/zoom (PTZ) cameras, wall and ceiling, and how many cameras are adequate will be determined in coordination with representatives of the Office of Security and Integrity (OSI), Physical Security Section (FSS).

Fixed Wall Mounted IP Cameras (FC):

1. Fixed cameras will be positioned to view activities at the loading dock, guard screening areas, lobbies, waiting room information counters, entrance doors, and coverage of the exterior of the building/parking areas.
2. Exposed camera wires should be covered by flex conduit or installed in a neck mount system to deter tampering.
3. All exterior camera housings must be weather resistant and capable of operating in extreme hot/cold environments as well as high and low humidity environments.
4. Cameras will be pointed at an angle pointed downward providing a field of vision to satisfy the area to be protected.
5. Camera will be equipped with Infrared Illuminators allowing viewing out to a minimum 35 feet with built in light sensor.

6. Camera will be true day/night utilizing an automatic infrared (IR) cut filter to switch between color and black/white modes when environmental lighting conditions change and the need for infrared sensitivity is required.
7. Optical lens must be varifocal with auto iris for focusing. (Coordinate with the USCIS to determine the appropriate varifocal lens for each camera.)
8. Cameras will be high definition at 1080P.
9. Camera will be Microsoft Windows compatible.
10. Camera will be powered by Power over Ethernet (PoE).
11. Camera will be equipped with motion detection for motion detected recording.

Pan/Tilt/Zoom (PTZ) Cameras:

1. For use as corner roof mounted. These cameras are used to supplement fixed cameras.
2. All exterior camera housings must be weather resistant and capable of operating in extreme hot/cold environments as well as high and low humidity environments. Cameras will be mounted parapet style mounts with swing-in arms for maintenance/repairs to camera from roof access. Cameras will hang out and above corner of facility to allow an unimpeded 360 degree view.
3. Camera will be equipped with Infrared Illuminators that allow viewing out to the maximum optical zoom capability of the camera. Note: Optical zoom distances will be based on the distance needed to accurately identify the size, and shape of an object, as well as general facial features of an intruder on the premises covered by the camera.
4. Camera will be true day/night utilizing an automatic infrared (IR) cut filter to switch between color and black/white modes when environmental lighting conditions change and the need for infrared sensitivity is required.
5. Cameras will be high definition 1080P.
6. Camera will be high resolution up to maximum effective optical zoom range.
7. Camera will be Microsoft Windows compatible.
8. Camera will be powered by dedicated AC/DC.
9. Camera will be equipped with motion detection for motion detected recording.

Network Video Recorder (NVR):

1. The NVR is for local IP IPVSS recording. NVR will be rack mountable and located in LAN room.
2. NVR will have the capacity to record at high quality for 60 days of recording of all cameras with a minimum of 10 Terabytes of storage capacity. The use of motion activated recording is required to reduce storage capacity while still meeting the 60 day requirement. Note: NVR will overwrite video stored by oldest date automatically once it has reached capacity.
3. NVR will allow playback by choosing date and time and must auto adjust for daylight savings time changes.
4. NVR will support the amount of cameras on the system using IP based Ethernet (RJ45) connections.
5. NVR will be Microsoft Windows compatible.
6. NVR will be capable of recording up to 1920x1080 resolutions with a 1280x720 resolution at 30 frames per second.
7. NVR video compression will be MPEG-4.
8. NVR will be capable of alarm triggered camera action.
9. NVR will allow for export to DVD.
10. NVR will support remote management and configuration.

11. NVR will support activity log.
12. Functions will include alarm outputs, time/date stamps, motion detection, management software, manage color/black and white cameras, and allow operation in duplex mode.
13. NVR will produce footage copies with watermarks or security stamps to prevent tampering and/or manipulation.

IP Audio/Video Intercoms:

1. Audio/visual intercom transmitters (AVT) will be located at mail rooms and loading dock area and capable of remote door release. Audio/visual receivers (AVR) will be located at guard station and/or the mission support area.
2. Intercoms will allow for electric remote door release controlled at receiver station.
3. Aiphone IS Series or equal required.
4. Intercoms will be a single integrated component consisting of a camera, speaker, and microphone on the transmitter end (customer side). It will also be equipped with hands-free and push-to-talk functions.
5. Camera will be a 170 degree wide angle field of vision.
6. Intercom transmitters exposed to outside elements will be in weather and tamper resistant housings.
7. Intercom transmitter will be positioned to allow for clear facial recognition.
8. Intercom receiver (monitoring end) component will be a standalone device system with viewing screen, remote door release function, hands-free and push-to-talk functions.
9. Intercom will integrate with electric strikes for remote release of doors it communicates with.
10. Intercom transmitter buttons will be labeled.
11. Intercom receiver buttons will be labeled to identify which transmitter it is communicating with and which door it is releasing.

U.S. Citizenship and Immigration Services

Structured Cable Plant Standard

Office of Information Technology

in collaboration with

Office of Facilities and Space Management

MARCH 2021

Version 2.3

EXHIBITS

1.0 INTRODUCTION

1.1 Purpose

This document has been prepared for the Citizenship and Immigration Services (USCIS) with the specific purpose of setting standards for structured cable plants in support of Local Area Network (LAN), voice connectivity and security applications that will function as follows:

- Accommodate the functional requirements of present and future information services.
- Support a multi-product and multi-vendor environment.
- Facilitate the planning and installation of cabling systems that will support the diverse communication needs of building occupants.
- Ensure uniformity of structured wiring and hardware infrastructure installations in all USCIS facilities.

The primary focus of this document is to define the standards for material, infrastructure, design, installation, and certification with respect to structured cabling systems for USCIS facilities. This document shall replace, modify, or otherwise supersede previous releases of these standards. An electronic version of this document resides in the Office of Information Technology (OIT) intranet Web site. For questions or comments regarding this document, contact:

Branch Chief – Converged Services Implementation
USCIS Office of Information Technology
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1.2 Background

Citizenship and Immigration Services (USCIS) is a component of the U.S. Department of Homeland Security (DHS). The mission of U.S. Citizenship and Immigration Services (USCIS) is to secure America's promise as a nation of immigrants by providing accurate and useful information to our customers, granting immigration and citizenship benefits, promoting an awareness and understanding of citizenship, and ensuring the integrity of our immigration system.

Due to the increasing demands on Service resources, USCIS personnel must be able to share information rapidly and efficiently in order to succeed in fulfilling the Service mission.

In addition to this document, which establishes the cabling standards for USCIS, other documents are being developed that provide additional related information such as:

- USCIS Computer and Telephone Room Standards & Appendix A
- USCIS AV Standards (Audio Visual)
- USCIS FSS Requirements (OSI – Facility Specific Security - Standards)
- USCIS Computer Equipment Standards

- Facility LAP (Lease Acquisition Projects) will typically include coordination meetings and approximately three (3) site visits for the installation of cable plant in accordance with the site specific S.O.W. Typical project schedule: **1st)** cable plant kick-off meeting prior to start of

installation and acceptance of submittal package to review process, drop totals, faceplate configuration and labeling sequence prints along with wireless / overhead / reservation drop requirements, Visio layout & elevation drawings and A/V requirements, manufacturer warranty, building Demarcation, circuit installations, network, PBX & server hardware deployments, occupancy, etc. **2nd)** review cable plant installation, closet build-outs, etc. prior to ceiling tile installation **3rd)** final GSA acceptance and inspection of cable plant to verify labeling & drop locations, inventory of specified components per S.O.W., MDF / Computer Room and if applicable, TR('s) / IT Closet(s) final build-out, electrical requirements, Demarcation cable extension, etc.

1.3 Scope

1.3.1 System

Typical structured cabling systems include the following elements:

- Horizontal cable
- Horizontal cross-connects (HC / TC)
- Transition or consolidation point (optional)
- Main cross-connect (MC / MDF)
- Intermediate cross-connect (IC / IDF)
- Backbone cabling (Intra and Inter)
- Equipment Outlet / Telecommunication Outlet (EO / TO)
- Work area (WA)
- Computer (MDF) & Telecommunication Rooms / Remote Wiring Closet (TR / RWC)
- Entrance facility (EF)
- Equipment room (ER)
- Bonding (Grounding & Earthing)
- Administration

1.3.2 Documentation

This document is intended to address the following specifications and installation practices related to structured cable plant installation:

- Recognized media
- Closet requirements, environmental and design
- Distribution cabling
- Cabling specifications and limits
- Installation practices
- Performance testing
- Supporting documentation

1.4 Regulatory references

The cabling system described in this document is derived from the recommendations made in recognized Telecommunications Industry Standards. The following documents are incorporated by reference: ***NOTE: Please reference latest versions of the standards and documents listed below if applicable.**

1. USCIS Structured Cable Plant Standard & ANSI/TIA/EIA Standards with special sections noted below
2. ANSI/TIA-526-7-A – Measurement of Optical Power Loss of Installed Singlemode Fiber Cable Plant
3. ANSI/TIA-526-14-C – Measurement of Optical Power Loss of Installed Multimode Fiber Cable Plant
4. ANSI/TIA-568.0-E – Generic Telecommunications Cabling Standard for Customer Premises
5. ANSI/TIA-568.1.E – Commercial Building Telecommunications Cabling Standard
6. ANSI/TIA-568.2-D – Copper Cabling Standard - Balanced Twisted-Pair Telecommunications Cabling
7. ANSI/TIA-568.3-D – Optical Fiber Cabling Components Standard
8. ANSI/TIA-569-E – Commercial Building Cabling Standard for Telecommunications Pathways and Spaces
9. ANSI/TIA-570-D – Residential Telecommunications Cabling Standard
10. ANSI/TIA-862-B – Structured Cabling Infrastructure Standard for Intelligent Building Systems
11. ANSI/TIA-5017 - Telecommunications Physical Network Security Standard
12. ANSI/TIA-598-D – Optical Fiber Cable Color Coding
13. ANSI/TIA-606-C – Administration Standard for Telecommunications Infrastructure of Commercial Building
14. ANSI/TIA-607-D – Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications
15. ANSI/TIA-758-B – Customer-Owned Outside Plant Telecommunications Cabling Standard
16. ANSI/TIA-862-B – BAS, Building Automation Systems Cabling for Commercial Buildings
17. ANSI/TIA-942-B – Telecommunications Infrastructure for Data Centers
18. ANSI/TIA-1005-A – Telecommunications Infrastructure for Industrial Premises
19. TIA TSB 5018 - Structured Cabling Infrastructure Guidelines to Support Distributed Antenna Systems
20. TIA 455-C, TIA-492 Series 2000, TIA-526-7-A, TIA-526-14-C, ANSI/TIA-568.3-D – Guidelines for Multimode and Singlemode Fiber Optic Cabling & Field-Testing
21. TIA TSB 140 – Additional Guidelines for Field-Testing Length, Loss and Polarity of Optical Fiber Optic Cabling
22. TIA TSB 4979 - Practical Considerations for Implementation of Encircled Flux Launch Conditions in the Field
23. ANSI/TIA-492-AAAC-D – Detail Specification for 850-nm Laser-Optimized, 50-um Core Diameter/125-um Cladding Diameter Class 1a Graded-index Multimode Optical Fibers (OM3/OM4). Current Edition
24. ANSI/TIA-1062 - Telecommunications Telephony Aspects of MLTS and Packet based Equipment, including VoIP Interface Requirements for Packet-based Gateways
25. ANSI/TIA-1152-A - Requirements for Field Test Instruments and Measurements for Balanced Twisted-Pair Cabling
26. ICSI-TDMM Latest Edition, Building Industries Consulting Services International
27. National Fire Protection Agency
28. National Electrical Code (NEC)
29. NEMA 250
30. National Electrical Safety Code (NESC)
31. IEEE-C2
32. FSS Requirements (OSI Security Standard)

If this document and any of the documents listed above are in conflict, then, as a general principle, the more stringent requirement shall apply. However, in all cases where there appears to be conflict or a specification is not clear to the contractor, the USCIS Cable Plant Management or USCIS Technical Representative must be contacted for clarification.

The contractor will abide by all applicable federal, state, county and local building codes and safety regulations along with providing required permits if applicable.

2.0 OBJECTIVES

2.1 Network Requirements

The objective of this network approach is to provide USCIS with a standardized, cost-effective cable plant infrastructure that will accommodate present and future voice, video, data and security requirements. To ensure the longevity of the application, the structured cable plant will include a minimum 15 year application assurance warranty. Workstation cabling infrastructure shall support bandwidth demands from 100 Megabits per second (Mbps) up to 10 Gigabit speeds. Fiber optic backbone cable infrastructure shall support bandwidth demands for 10 Gigabit Ethernet. SM (Singlemode) fiber optic cable into the facility will support these larger data circuits provided by the service provider. The installation of the cable plant infrastructure shall comply with UL ratings and installation requirements of ANSI/TIA/EIA – 568C, NFPA, ASTM, NEC, local, state and federal codes and standards. This standard also provides the implementation of a one-wire solution for VoIP applications typical for USCIS facilities.

2.1 Cable Plant Specific Site Requirements

The structured cable plant standard design shall utilize the following cable distribution methods to support conductivity throughout the building:

- Horizontal workstation cabling, which will connect the user workstation, or equipment outlet / telecommunication out (EO / TO) to the nearest Computer / Telecommunication Room (MDF / TR) in a star topology shall be plenum Category 6. The EO / TO shall consist of two (2), Cat 6, plenum cables white in color (2D - two data) unless otherwise specified. A wall phone location shall consist of one (1), Cat 6 plenum white cable for voice. If the quantity of cables deviates from these standard and S.O.W. Site Specific Requirements, the quantity will be specified on the provided print(s). NOTE: The previous triplex standard, V2.1 with three (3), Cat 6, plenum cables white in color (2D/1V - two data & one voice) may apply for existing facilities or special applications. The V2.1 standard is available upon request.

- The EO /TO shall consists of two (2) Cat 6, modules or jacks, two data "A" & "B" (1 - blue & 1 - red in color) in a 2-port faceplate. **Exception: If the previous standard applies, one voice "C" (white in color) will be utilized in a 4-port faceplate. Also "D" may be applied for special application for training room requirement, multi-user work area application or security, etc. (gray in color – Cat 6A) or F-Series module for a CATV RG6U coaxial cable.**

- The faceplate of the EO / TO shall be white in color and have the flexibility of supporting two (2) inserts (jacks, modules, etc.). Any unoccupied opening(s) shall be filled with a blank insert which matches the color of the faceplate. The faceplate color may be changed to match the décor of the electrical devices and system furniture (utilized in baseboard). **Exception: 4 or 6-port faceplates may be utilized for locations with multiple drops.**

- The wall phone outlet shall consist of one (1) Cat 6, modules or jacks for voice (white in color) in a stainless steel plate with mounting studs. The outlet shall be at the specified height for mounting of the device to meet ADA compliance.

- The horizontal workstation cabling for the EO / TO drop locations will be terminated in the nearest Computer / Telecommunication Room (MDF or TR) to Category 6, forty-eight (48) & twenty-four (24) port patch panels with horizontal wire management with hinged covers. The patch

panels will be labeled accordingly with "A" & "B" to identify the data and voice cabling. **Exception: "C" & "D" if applicable.**

- The horizontal workstation cabling for the wall phone drop locations will be terminated in the nearest Computer / Telecommunication Room (MDF / TR) to Category 6, twenty-four (24) port patch panel with horizontal wire management with hinged covers. The patch panel will be labeled accordingly with "W" to identify the single voice locations. **NOTE: A minimum of twelve (12) Cat 6 cables may also be terminated on the last twelve ports on the "W" wall phone patch panel for closet to closet conductivity for special applications to include equipment monitoring devices, Q-Flow, etc. Exception: ("D" cables may also be terminated on "W" patch panel if applicable)**

- The MDF / Computer & Telecommunication Room(s) will consist of standard equipment rack(s), 7' x 19", with 10" vertical, doubled-sided, hinged wire management (6" may apply depending on TR / IT Closet size) and double-sided horizontal 3U, 2U & 1U wire managers, black in color (to support all cable routing), shelves and PDU's along with complete 24" ladder runway system with rack elevation kits and drop-outs mounted above rack / cabinet configurations. (18" ladder runway may be specified in TR('s) / IT Closet(s).

- The MDF / Computer Room will support a minimum of four (4) - twelve 12-port remote patch panels with Cat 6 cables will be installed on the ladder runway above the Server and PBX / VoIP enclosures and cabinets along with Security for network connections. These remote patch panels will have bundles of twelve (12) Category 6 cables routed to a Category 6, twenty-four 24-port patch panel located in an equipment rack and installed with horizontal wire management with hinged covers. The patch panel(s) will be labeled accordingly with "S" to identify the server cabling. **Exception: Special application due to space allocation may allow for fewer remote patch panels with prior approval.**

- The Building Demarcation is typically required to be extended to the MDF / Computer Room with a minimum, CMP plenum-rated or CMR riser-rated 50-pair Category 3, copper backbone cable, terminated on 110 stand-off blocks (110FT) on each end for extension of voice, data and security circuits or analog (POTS) lines will be specified. Also an armored, plenum cable 50/125um LOMM OM3, Multimode, fiber optic backbone cable is extended for data circuit extensions with LC LOMM duplex panels and LOMM connectors in a wall-mount enclosure int the Building Demarcation and rack-mount in the MDF / Computer Room. SM (Singlemode) armored, plenum fiber cable may be specified as an exception for longer distances in facility risers. Two (2) 4" EMT conduit raceways with pull strings are provided by the electrician for the installation to the Building Demarcation, which is for security requirements and may be on the same floor or many so the cable length will depend on the actual distance. An additional 24-port patch panel mounted on a 19" stand-alone rack may be specified to extend circuits to the plywood backboard for extension of the circuits in the S.O.W.

- If applicable, where closet to closet conductivity is required for voice between the TR(s) and the MDF, a plenum Category 3 multiple pair, copper backbone cable will be specified. For intra-building conductivity the pair count will be specified and terminated on 24 or 48-port patch panels for voice cross-connect. (Pre-terminated, 25-pair Amphenol style patch panels may also be specified in the S.O.W. for PBX / Voice Server connections for analog port connections.)

- Where closet to closet conductivity is required for data, voice (VoIP) and security between the TR(s) and the MDF / Computer Room, a plenum armored, 12-strand (Exception: 24-strand for

special applications), 50/125um LOMM OM3, Multimode, fiber optic backbone cable will be specified. An armored, plenum cable is specified for intra-building conductivity for data, voice and security applications (standard to utilize last pair), with enclosures, SC LOMM duplex panels and LOMM connectors are required for the system installation along with specified lengths and type of duplex 50um LOMM fiber optic jumpers, aqua in color. (SC-SC, SC-LC, LC-LC, etc.) **Exception: USCIS existing infrastructure is 62.5um fiber optic cable for many facilities and applications, which may be specified with prior approval. Plenum armored, twenty-four strand, 50/125um LOMM OM3 or OM4 may also apply for special applications.** Also copper tie cables will be extended for voice and overhead paging requirements consisting of a combination on 5 or 50-pair Cat 3, Cat 6 and 22 or 18 AWG multi-conductor type cables.

- The equipment rack elevations and Computer / Telecommunication room layout(s) of the patch panels, wire management, enclosures, shelves, PDU's, UPS (if specified), etc. will be provided in the elevation drawings. The installer contractor is required to install networking hardware and provide patch cable installation. The standard configuration is: 100% of "A" ports blue in color, 20% of "B" ports, red in color and 100% of "S" ports, violet in color shall be patched in the MDF & TR(s) locations. Provide 10' black patch cables for "A" and "B" ports patched for workstation at EO / TO. The patch cables for voice are also required with quantities and lengths specified in the S.O.W. for 20% of the "W" ports. (Additional quantities may be required if cross-connect if TR location exist) Other miscellaneous colors, lengths and quantities of patch cables for special applications may be requested in the provided S.O.W.

- The patch cable length may vary depending on specified network hardware deployment. Network switches may be mounted above or below Category 6, forty-eight (48) & twenty-four (24) port patch panels and utilize shorter, certified manufacturer specific patch cables. Lengths may vary in Computer / Telecommunication Rooms: 1', 3', 5', 7', etc. **NOTE:** Patch cables must be labeled on each end with designated sequence as specified, Section 5.3. **Exception: 1' patch cables may utilize one identification label due to length.**

- **Wireless Applications:** The installation requirements for the USCIS Wireless application throughout a facility will be included in the build-out of a project. The requirement includes two (2) Cat 6 plenum cables, with two (2) data Cat 6, modules or jacks, "A" & "B" (1 - blue & 1 - red in color) in a 2-port surface boxes, mounting brackets, termination on "A" & "B" patch panels, wire management, green patch cables, etc. along with installation labor, which will be typically specified in a provided S.O.W. Site specific details will be included in the S.O.W. for the requested installation and components to comply with the facility requirements. **NOTE: Two (2) data Cat 6, "green" modules or jacks, "AP" may be specified for existing facilities for the wireless application.**

- **Q-Flow Application & Digital Signage:** Where applicable, the installation requirements for the USCIS Q-Flow application in the Information / Adjudication Waiting Rooms will be included in the build-out of a project for LCD locations. The requirement includes Cat 6 plenum cabling, with two (2) data Cat 6, modules or jacks, "A" & "B" (1 - blue & 1 - red in color) in a 2-port faceplate, termination on "A" & "B" patch panels, patch cables, etc. along with installation labor, which will be typically specified in a provided S.O.W. Site Specific Requirements for installation and components to comply with the facility.

- **Voice Overhead Paging & Reservation Applications:** Where applicable, the installation requirements for the USCIS Overhead Paging System application throughout the facility and in the Information / Adjudication Waiting Rooms, etc. along with reservation systems for

Conference, Team and Training rooms will be included in the build-out of a project. The requirement includes two (2) Cat 6 plenum cables, with two (2) data Cat 6, modules or jacks, "A" & "B" (1 - blue & 1 - red in color) in a 2-port surface boxes, mounting brackets, termination on "A" & "B" patch panels, violet (purple) patch cables, etc. along with installation labor, which will be typically specified in a provided S.O.W. Site Specific Requirements for installation and components to comply with the facility.

- **Security System Application:** **NOTE: As part of a new USCIS process, the OIT contractor will typically be responsible for the installation of the security cable installation for LAP projects only, which the security vendor will terminate accordingly with the exception of the Cat 6A cable. The security cable requirements and labeling are included in the Site Specific Cable Plant S.O.W.** The installation requirements for the USCIS Security System applications on the network throughout a facility will be included in the build-out of a project. The cable requirements include plenum Cat 6A (gray in color), banana-peel or type and multi-conductor cables (18/6, 18/2, 22/2, etc. - gray in color), Cat 6A patch panels, wire management, Cat 6A conductivity / termination hardware, plenum surface boxes, faceplates, patch cables (also gray in color), racks, cabinet (provided by the security vendor), etc. along with installation labor. These requirements are also referenced in the Security S.O.W., for the requested installation and components to comply with the facility requirements. **NOTE: The security Cat 6A cables may route with the IT cable plant within the basket tray and category-rated j-hook assemblies, but all of the multi-conductor cables must maintain a minimum of 2" clearance and shall be installed in separate supporting assemblies accordingly along with separation throughout routing in the basket tray, racks, cabinets, vertical wire management, etc. Security cabling should also follow the industry standard for maximum length requirements of 90m / 295' along with utilizing designated new or existing OIT specified spaces (Computer/LAN Room & TR's / RWC's) per floor for the security equipment, following the typical star topology noted below for horizontal cabling. OIT may authorize an exception if the manufacturer's cable specifications provide different direction for length. Also the AWG # conductor gauge size may also need to be increased due to voltage drop for longer cable lengths based on design. Reference the manufacturer installation specifications for specifications.**

- **CATV (Cable Television) Application:** Where applicable, the installation requirements for the USCIS CATV application may include the Information / Adjudication Waiting Rooms, FDNS Suites, Conference Rooms, Natz. Ceremony Rooms, District or Field Director's offices, etc. will be included in the build-out of a project. The requirements may include plenum RG6U cabling, RG11 backbone cabling, conductivity / termination hardware, etc. along with installation labor, which will be typically specified in a provided S.O.W. Site specific details will be included in the S.O.W. for the requested installation / components to comply with the facility requirements.

- **Tool Kit, Butt Set & Step Stool:** Where applicable, items may be included with the site specific details included in the S.O.W. for IT service support to perform miscellaneous M.A.C. requests accordingly following occupancy of a new facility.

- **Bonding and Grounding**: Must be installed in accordance of standard J-STD-607-A and ANSI/TIA/EIA – 606 for labeling requirements. **All USCIS OIT and security cabinets must be grounded by the IT contractor accordingly with wire / components included in the S.O.W.**

*NOTE: Enhanced / Premium Cat 6e may be specified for facilities with length concerns / challenges or a design to support the servicing multi-floors from a MDF / TR. * Also if applicable, reference the provided USCIS Cable Plant S.O.W. for specific projects. The document will include site specific details, elevation / layout drawings, etc. for a project.*

3.0 GENERAL REQUIREMENTS: Commercial Building Telecommunication Cabling Standard

This section includes the six subsystems of a structure cabling system. These specifications reference the American National Standards Institute (ANSI)/Telecommunications Industries Association (TIA)/Electronic Industries Association (EIA) 568C recommendations. Detailed cable plant specifications and guidelines unique to USCIS are provided in Section 4.

3.1 Entrance Facilities (EF)

The building entrance facilities provide an interface for services within the structure. Outdoor cabling from a service provider or inter-building between facilities which enter the building will interface to the intra-building backbone cabling. Please refer to TIA/EIA -568C standard which defines physical requirements of the network interface. The network cable plant shall utilize the following cable distribution methods to support connectivity throughout the building.

3.2 Equipment Room (ER) / MDF (Main Distribution Frame / Computer Room)

The equipment room will contain high-end hardware for the facility and provide an interface to the Computer /Telecommunication room(s) through intra-building backbone cabling. The functions of a TR may also be provided in the ER, this may be determined on the size of the facility. Please refer to TIA/EIA -568C standard for design requirements. USCIS may incorporate the functions of the EF & ER within a single space which is typically referred to as the MDF / Computer Room in a facility.

3.3 Backbone Cabling

The backbone may consist of inter-building or intra-building cabling providing the facility with an interconnection between the TR, ER and EF. A vertical connection or risers between floors will be required for a facility with multiple floors. Multiple closets may be required depending on the size of the site. The cross-connection for backbone cabling will be with intermediate and main cross-connects mechanical terminations, patch cords, jumpers, etc. for interface of multiple services types. Some design requirements include:

- Star topology
- No more than two hierarchical levels of backbone cross-connects
- No bridge taps are allowed
- Main and intermediate cross-connect patch cords or jumpers should not exceed 20m or 66 feet
- Areas of high levels and sources of EMI/RFI should be avoided
- Work zone distribution cabling for open office space
- Bonding (Grounding & Earthing) should meet the standard requirements of J-STD-607-A

3.4 Computer & Telecommunications Room (MDF & TR)

The Computer / Telecommunications Rooms will contain the components of the structured cabling system and equipment or connection for services supporting the users of voice and data. The terminations and cross-connections for voice and data of the horizontal and backbone cabling are contained in this space. Please refer to the TIA/EIA - 569 standard for design requirements.

3.5 Horizontal Cabling

The horizontal cabling is the connection extending services from the Telecommunications Room (TR) to the Equipment Outlet (EO) / Telecommunications Outlet (TO). This connection consists of horizontal cabling (UTP, ScTP, fiber optic, etc.), telecommunications outlet (faceplate, furniture outlet, multiple outlet system, etc.), cable terminations (patch panels, blocks, jacks, modules, etc.) and cross-connections (patch cables, cross-connect wire, jumpers, etc.). The four types of recognized media for horizontal cabling are:

- 4-pair UTP cable
- 4-pair ScTP cable
- 2-fiber, 62.5/125um optical cable
- 2-fiber, 50/125um optical cable

The maximum distance of horizontal cabling is 90m or 295 feet. A total of 10m or 33 feet is allowed for the patch cables in the TR and at the work area. To comply with TIA/EIA-568C specification distance limits, the cable run from any user workstation location to the nearest wiring center shall not exceed 100 meters (328 feet). The actual length of a cable run is defined as the total combined length of the horizontal cable, work area and TR patch cables. When planning or designing office space the TR locations should be located within 90 meters of any workstation outlet. This design approach allows for the addition of patch cables without exceeding the specification distance limits. **NOTE: Enhanced / Premium Cat 6 may be specified for facilities with length concerns / challenges or a design to support the servicing multi-floors from a MDF / TR. This allows for a cable length up to 106 meters and 10 meters of patch cables, which will meet some manufacturer requirements for an extended distance channel warranty for a 15-year time frame. See compliant manufacturers for specifications.**

A multi-user equipment outlet assembly (MUTOA) is optional for open office environments. The MUTOA is not allowed in ceiling or access or raised floor applications. Special work cable area (patch cable) lengths are required depending on the horizontal cable length. Please refer to the standard requirements of TIA/EIA-568C for installation, labeling and a table for horizontal and work area cable lengths.

A consolidation point is also an option for open office environments or similar application with multiple variations for installation. Only one consolidation point is allowed in the horizontal cabling and a distance of 15m or 49 feet for the TR and UTP cable must be extended to the work outlet. The transition from UTP to flat under carpet cable is not allowed. Please refer to the standard requirements of TIA/EIA-568C for installation, labeling and spare requirements.

The use of centralized optical fiber cabling offers flexibility with centralized electronics or server farms with fiber horizontal and backbone. Please refer to the standard requirements of TIA/EIA-568C for installation requirements.

Note: Building pathways shall be installed in "dry" locations that protect cables from moisture levels that are beyond the intended operating range of "inside" premise cable. Slab-on-grade designs wherein the pathways are installed underground or in concrete slabs that are in direct contact with earth are considered to be "wet locations". If applicable, the appropriate OSP (Outside Plant) cabling for this location should be installed to meet the specification of the condition along with the associated hardware.

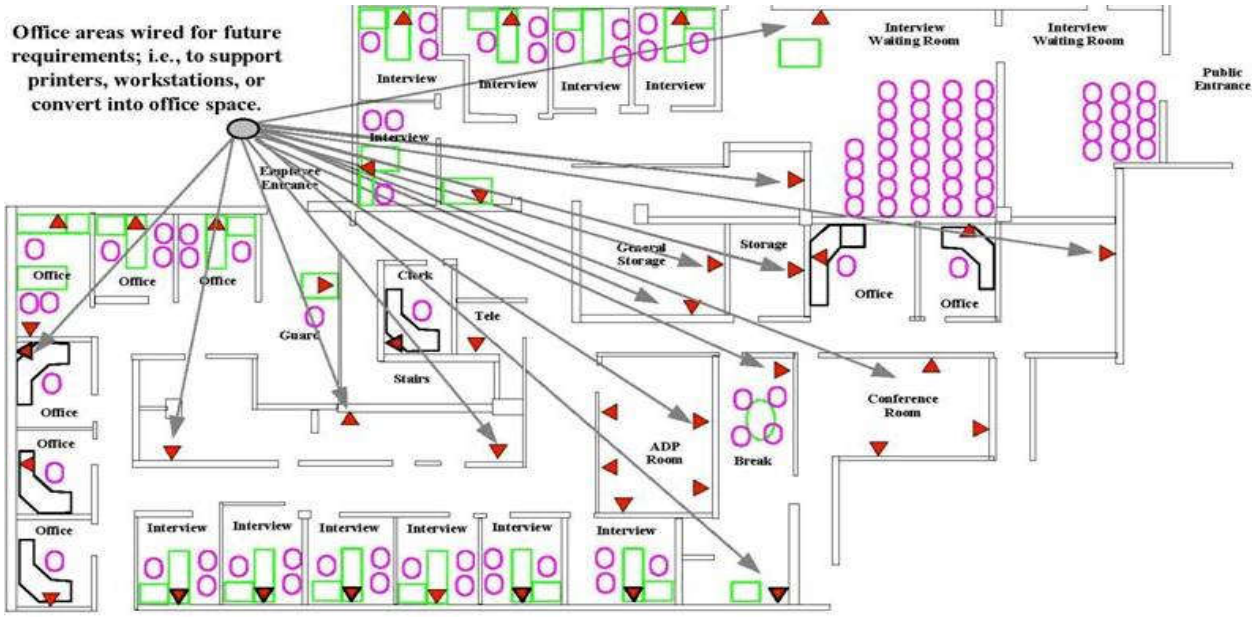
3.6 Equipment Outlet / Telecommunication Outlet

The Equipment Outlet / Telecommunication Outlet should have a minimum of two outlet ports, one

for voice (100 ohm UTP/ScTP 4-pair, 568A or 568B) and one data (100 ohm UTP/ScTP 4-pair, 62.5/125um or 50/125um fiber). Please refer to TIA/EIA -568C standard for requirements.

*NOTE: Please reference USCIS typical Equipment Outlet / Telecommunication Outlet (EO / TO) configuration listed above in the Cable Plant Specific Site Requirements and Exhibit # 10.

Exhibit 1: Typical Office Cable Design



4.0 SPECIFICATIONS

This section provides detailed component characteristics and specifications with respect to the materials used to install the structured cable plant. The key design requirements have been include for each section.

Exceptions:

If an existing facility is collocated with another DHS agency then all new cabling will follow the current building standards of the hosting agency, except it must meet the minimum requirement of Category 6 cable as specified in Exhibit 2.

Any questions should be directed to the Branch Chief – Converged Services Implementation

USCIS Office of Information Technology
Enterprise Infrastructure Division
70 Kimball Ave.
South Burlington, VT 05403

NOTE: A minimum 15 year performance / application assurance warranty on the Structured Cable System Installation shall be issued by the manufacturer of the conductivity hardware. All components of the cable plant shall be included in the provided warranty with the manufacturer of the conductivity hardware or the cable manufacturer as the single point of contact. Any exception on the manufacturer support of warranty must be reviewed and approved by an OIT USCIS representative.

4.1 Horizontal Cabling

The specified horizontal cabling will consist of a star topology extending from the TR to the work area EO. The horizontal cabling system components consist of the horizontal cabling, information outlet, cable terminations, cross-connect patch cables. All cable, equipment, and materials shall meet applicable ANSI/TIA/EIA-568C, National Electrical Code (NEC), Institute of Electrical and Electronics Engineers (IEEE) 802 and Underwriters Laboratory (UL) Verification Program standards. All cable equipment and materials must be manufactured by facilities that are International Organization for Standardization (ISO) 9001 registered and certified.

- Shall be Category 6 rating in accordance with ANSI/TIA/EIA-568C along with offering Enhanced / Premium Cat 6 cable products.
- Four-pair, eight conductor, 100-Ohm, 23-24 American Wire Gage (AWG), solid annealed bare high quality copper.
- The cable should have contiguous, 2-foot segment-length markers printed on the cable jacket. The markings must also show the applicable performance CAT 6, as well as the fire rating of the cable being installed.
- The finished cable shall be 100% plenum, CMP, rated in accordance with the requirements of UL 444, NFPA 262, and ASTM D 4566-05 standards. **(See Exceptions Below)**
- **All horizontal cables must have a jacket color of white (unless otherwise specified).**
- If an existing cabling infrastructure is in place, the specifications may vary to match the color and cable type. Any deviation from the above standards must be authorized.

Note: Category 6 cable must meet or exceed specifications listed in Exhibit 2.

Exhibit 2: Category 6 Cable Specifications

Specification	Category 6 (250MHz)
Frequency Range	1-250 MHz
Insertion Loss (minimum)	32.8 dB
NEXT (minimum)	38.3 dB
PSNEXT (minimum)	36.3 dB
ACR (minimum)	6.6 dB
PSACR (minimum)	3.6 dB
ELFEXT (minimum)	19.8 dB
PSELFEXT (minimum)	16.8 dB
Return Loss (minimum)	17.3 dB
Propagation Delay(maximum)	538 nanoseconds (ns) @ 250MHz
Delay Skew (maximum)	45 ns / 100m @ all frequencies

Exception: CM or CMR may be utilized if installed in conduit raceway or in specified space for application with prior authorization only. Category 6A UTP may be specified for a unique and / or security requirements (cameras, video, environment, etc.) upon prior approval only or per specifications listed in a S.O.W. provided by USCIS. All components must be compliant for a specification of Cat 6A UTP systems and meet manufacturer requirements.

4.2 Equipment Outlets / Telecommunication Outlets

Each workstation area shall use a standard EO / TO (faceplate, system furniture plates & surface boxes) that can support a minimum of four (4) inserts (jacks, modules, etc. of RJ-45 footprint non-keyed). Dual-connection interfaces may be utilized if EO supports minimum of (4) connections. If a fiber optic termination is utilized in the EO, an insert(s) which support SC simplex or duplex connection are required. Regardless of the installation contractor, all voice and data cable shall utilize a single Equipment Outlet, which includes surface boxes for above ceiling installation for wireless / overhead paging applications. Equipment Outlets must be capable of future growth without the need to replace the entire assembly. If the EO / TO utilizes a dual gang plate at the workstation drop location the designated ports shall be located in a left to right configuration (consider location as two standard drops).

- Shall be White or Off-White in color.
- Shall provide for two (2) or four (4) inserts (jacks, modules, etc.).
- Shall offer six (6) inserts in a single-gang footprint (jacks, modules, etc.).
- Shall accommodate opening size provided in system furniture baseboard or channel opening.
- Shall offer a double-gang footprint (accepts typical of eight (8) – twelve (12) jacks, etc.).
- Shall offer ANSI/TIA/EIA symbol icons or shutters for application identification (DATA, VOICE, etc) in multiple colors and configurations.
- Provide individual label window(s) for cable identification (mandatory requirement).
- Provides a high-density design.
- Constructed of high impact, flame-retardant thermoplastic to meet requirement for above ceiling installation for wireless / overhead paging / reservation system applications.
- Be independently verified for Category 6 compliance.
- Provided Channel Solution with patch cable assemblies for Category 6 compliance.
- Meets or exceeds ANSI/TIA/EIA- 568C for Category 6 specifications and have designation visually displayed.
- Must be certified by the UL.
- Mounts to standard electrical single gang and dual gang boxes.
- Available in a multitude of colors.
- Offers non-keyed RJ-45 style connectors with shutter or protection cover assembly.
- Provide category ratings on outlet per ANSI/TIA/EIA standard.
- Allow termination with a single conductor impact tool.

• Provides backward compatibility to allow performing categories of cables or connecting hardware to operate to their full capacity.

• Provides standard 110D type Insertion Displacement Connector (IDC) Printed Circuit Board (PCB) mounted connector.

• Support industry standard for T568B wiring options on each individual module.

• Shall offer solutions for secure environments.

• Allows for a minimum of 200 terminations without signal degradation below standards compliance limits.

• Meets all ANSI / TIA – 1096-A, previously Federal Communications Commission (FCC) Part 68 specifications (shall have minimum of 50 micro of gold plating on each tine with minimum force of 100 grams).

• Must match make and model in existing facilities.

• Keystone style inserts (modules, jacks, etc.) required for all assemblies or adapters. The keystone allows for flexibility of manufacturer's products and compatibility within an existing faceplate.

• Provides interchangeability between multiple manufacturer type modules.

• Provides option in which module can be mounted into an IEC 60603-7 compliant opening (keystone).

• Shall offer SC simplex and duplex inserts for fiber optic connection(s) and also except LC, MTRJ, ST, etc. inserts.

• Match manufacturer and design of existing facility installations. (The faceplate color may be changed to match existing product type and/or the décor of the electrical devices. Any deviation from the standard must be authorized.)

• Shall offer plenum-rated assembly to meet requirement for above ceiling installation for wireless / overhead paging applications.

• Module must meet the following Category 6 performance specifications below.

Exhibit 3: Category 6 Module Specifications @ 250 MHz

PARAMETERS	Worst Case	Typical
Insertion Loss (dB)	0.12	0.14
NEXT (dB)	0.8432 dB	4.37
FEXT (dB)	2.1	5.1
Return Loss (dB)	6.9	8.3

4.3 Patch Cables

The installer contractor is required to install networking hardware and provide patch cable installation. The standard configuration is: 100% of "A" ports blue in color and 30% of "B" ports red in color shall be patched in the MDF and TR(s) locations. Provide 10' black patch cables for "A" and "B" ports patched for workstation at the EO / TO. The patch cables for voice are only required if specified in the S.O.W. for the "C" ports. If the quantity of patch cables deviates from these standards or if labeling is required, these items will be specified in the provided Scope of Work.

• Shall be compliant in accordance with ANSI/TIA/EIA-568C specifications for Category 6 transmission parameters up to 250 MHz and have designation visually displayed.

• 4-pair, UTP stranded conductors for extended flex-life cables.

• RJ-45 modular connector on both ends straight through termination (8 position / 8 conductor).

• Certified by the manufacturer of the termination hardware (best channel performance characteristics).

• Cables shall be available in a wide variety of colors and lengths.

• Length of any patch cable typically shall not exceed 16' (5m) unless otherwise specified for special application (training rooms, COOP, etc.).

• Provides backward compatibility with lower performing categories.

• Meets all Federal Communications Commission (FCC) Part 68 and IEC 60603-7 specifications (shall have minimum of 50 micro of gold plating on each tine with minimum force of 100 grams) and are resistant to corrosion from humidity extreme temperatures and airborne contaminants.

• Patch cable shall be secured with Velcro (tie-wraps shall not be used for any application of the installation)

• Quantities and lengths may vary due to layout of racks and equipment. * See Cable Plant S.O.W. Attachment A – Site Specific Requirements

• The patch cable length may vary depending on specified network hardware deployment. Network switches may be mounted above or below Category 6, forty-eight (48) & twenty-four (24) port patch panels and utilize shorter, certified manufacturer specific patch cables. Lengths may vary in Computer / Telecommunication Rooms: 1', 3', 5', 7', etc.

• See designation charts for specifications, color and length requirements. * See Exhibit 5 below

• Patch cables shall be labeled on each end with designated sequence as specified, Section 5.3. **Exception: 1' patch cables may utilize one identification label due to length if applicable.**

Exhibit 4: Category 6 Patch Cable Specification Chart

Frequency (MHz)	Attenuation (dB/100m)	PS ELFEXT (dB)	PS NEXT (dB)
1	2.4	67.8	72.3
4	4.5	55.8	63.3
10	7.1	47.8	57.3
16	9.1	43.7	54.2
20	10.2	41.8	52.8
31.25	12.8	37.9	49.9
62.5	18.5	31.9	45.4
100	23.8	27.8	42.3
200	34.8	21.8	37.8
250	39.4	19.8	36.3

Exhibit 5: Category 6 Patch Cable Color Chart (NOTE: Cat 6A utilized for Security)

Specification	Color	Length
"A" Port - Data(equipment rack)	**Blue**	1', 3' & 5' (unless otherwise specified)
"B" Port - Data(equipment rack)	**Red**	1', 3' & 5' (unless otherwise specified)
"C&W" Port - Voice (equip. rack)	White	7' & 10' (unless otherwise specified)
"D & Security" - Port (application)	Gray	3', 5' - 20'(unless otherwise specified)
Servers / AV (equipment rack)	**Black & Violet / Purple**	1', 5'- 15' (unless otherwise specified)
Servers / AV (cabinet / enclosure)	**Violet / Purple**	10' & 15' (unless otherwise specified)
Overhead Paging (equip. rack)	**Violet / Purple**	1', 3' & 5'(unless otherwise specified)
Wireless Use (drop & equip. rack)	**Green** / Gray (plenum)	1', 3' & 5' (unless otherwise specified)
Data A&B ports(VoIP phones/desktops)	**Black**	7',10'& 20' (unless otherwise specified)

Exception: Refer to USCIS Cable Plant Scope of Work for "Specific Site Requirements" which include lengths and quantities for individual projects.

4.4 Patch Panels

The patch panels for the data and voice, horizontal cabling shall be installed in the equipment racks in the TR(s). The patch panels shall be Category 6, forty-eight (48) & twenty-four (24) port with horizontal wire management with hinged covers. The patch panels will be labeled accordingly with "A", "B", "W" & "S" (if applicable "C") to identify the termination of data and voice cabling. Layout and elevation drawings will be provided for equipment rack(s).

The single voice wall phone, horizontal cabling shall be installed in the equipment racks in the TR(s) on a separate patch panel. This patch panel shall be a Category 6, twenty-four (24) ports with horizontal wire management with hinged covers. The patch panel will be labeled accordingly with "wall phone locations" to identify the termination of single voice locations.

- Shall be compliant in accordance with ANSI/TIA/EIA-568C specifications for Category 6 transmission parameters up to 250 MHz and have designation visually displayed.
- T568B wiring standards.
- Forty-eight (48) port & twenty-four (24) port standard configuration.
- Provide RJ-45 interface.
- Provides standard 110D type IDC termination.
- Provide rear wire management hardware for cable support.
- Provide modular design to facilitate field repairs.
- Available in low and high-density configurations.
- Meet the standard EIA-310 relay rack spacing specifications.
- Meets all ANSI / TIA – 1096-A, previously FCC Part 68 specifications.
- Available in twelve (12) port configuration (for server applications with mounting bracket or assembly); Utilized for application similar to consolidation point, MOS, MUTOA, etc.

• Available in blank port configuration, 12, 24, 48, etc. (multimedia, modular, quick port, keystone, etc.) to accept keystone modular assemblies; **Note - Utilized with prior authorization only.**

• Match manufacturer and design of existing facility installations. (The patch panel may be changed to match existing product type. Any deviation from the standard must be authorized.)

Exhibit 6: Category 6 Patch Panel Specifications

Specification	Category 6 (250MHz)
Frequency Range	250 MHz
Insertion Loss (minimum)	32 dB
NEXT (minimum)	46 dB
FEXT (minimum)	35.1 dB
Return Loss (minimum)	16 dB
LCL (minimum)	20 dB

4.5 Backbone Cabling

Intra and Inter-backbone cabling may consist of either or both copper and optical fiber cables and are required where there exists more than one wire center. The intra and inter-backbone shall be installed to provide structured connectivity between closets (see Exhibit 11). The installation provides a star-topology cable infrastructure that is capable of supporting high-speed and high bandwidth requirements between key resources in an enterprise building or campus environment. A multimode, singlemode or combination (hybrid) of fiber-optic backbone structure provides the means of interconnecting all wiring closets to the MDF in a multi-segmented environment. Optical fiber not only provides extensive bandwidth capabilities to the LAN and voice, but it also provides a solution to the distance-related problems encountered with copper cables in large installations and campus environments.

Copper backbone cabling is required to support voice services, however, the specifications and designs are determined on a site-by-site basis. This is due to the variety, funding, capacity and availability of voice services and designs. Copper backbone may also be installed to support networking services, where distance limitations do not exceed the ANSI/TIA/EIA-568C specifications. Copper backbone cabling provides a redundant connectivity option in the event of a catastrophic fiber failure, and shall be installed where voice and data closets are physically separated.

Each TR shall be connected to the MDF with a multimode 12-strand, LOMM OM3 fiber optic and a multi-pair Category 3, Cat 6 (if length permits) and if applicable a copper voice backbone cable. Considering the myriad of site functions, building designs, physical layout, application requirements and future technologies, backbone design is a critical element in the planning stages. Facilities and OIT will assist in the engineering design to ensure the short-term and long-term requirements are met in a cost-effective manner.

4.5.1 Intra-Building Voice Backbone Cabling (If applicable)

With VoIP, the distribution of voice conductivity from the MDF to the TR('s) may be plenum (CMP) Category 3 rated, 25 or 50-pair cable construction. The multi-pair cable for voice shall be gray in color. The pair count will be determined by the occupancy requirements and specified in the Scope of Work. The termination of the 25 or 50--pair cable will be distributed on Category 5e, twenty-four (24) port or forty-eight (48) patch panel with horizontal wire management. The cable will be terminated on the center-pins (white/blue & blue/white pair) for voice extension of the phone switch from the MDF location. The violet/slate & slate/violet pair will not be utilized on the patch panel. The patch panel shall be labeled accordingly to reflect the termination of pairs.

• 25-pair or one-hundred pair, 100-Ohm, 24 American Wire Gage (AWG), solid annealed bare high quality copper.

• The cable should have contiguous, 2-foot segment-length markers printed on the cable jacket. The markings must also show the applicable performance CAT 3, as well as the fire rating of the cable being installed.

• The finished cable shall be 100% plenum, CMP, rated in accordance with the requirements of UL 444, NFPA 262, and ASTM D 4565 & 4566 standards.

• All horizontal cables must have a jacket color of gray.

4.5.2 Inter-Building Voice Backbone Cabling

If the distribution of voice conductivity for building to building applications is required, an outdoor-rated, gel filled multi-pair cable shall be specified. The cable shall be terminated within fifty feet (50') upon building entrance in enclosures with protection-rated modules (gas or solid-state). Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements. If applicable, the Scope of Work will specify the pair count, cable design and protection requirements designated for the site installation.

4.5.3 Intra-Building Fiber Optic Backbone Cabling

4.5.3.1 Multimode Fiber Optic

The distribution of data conductivity from the MDF to the TR(s) shall be an armored plenum twelve-stand, 50/125um 10G multimode (LOMM / OM3), fiber optic cable will be specified. An armored, plenum cable is specified for intra-building conductivity for data applications. Please refer to the ANSI/TIA/EIA-568C standard for design and installation requirements.

• 50/125-µm optical fiber, LOMM OM3 10G

• 12 strand

• Maximum Attenuation: 3.0/1.0 dB km at 850/1300 nm

• Minimum Bandwidth: 2000/500 MHz km at 850/1300 nm

• Tight buffered

• Plenum (OFNP) indoor rated

• Armored plenum construction (Aqua in color)

- Armored cable shall be grounded accordingly per manufacturer's warranty requirements.
- Available in 6 & 24 strand for special applications
- Available LOMM OM4 10G for special applications

Exception with prior authorization only: Plenum indoor rated cable installed in a 1" innerduct, plenum rated and orange in color is an acceptable substitution if approved by the site representative prior to installation. ***A 62.5um fiber optic solution for special applications upon prior approval, since it may still be the existing infrastructure of many USCIS sites.**

4.5.3.2 Singlemode Fiber Optic

If the network equipment specifications require the installation of a singlemode (SM), backbone for conductivity from the Building Demarcation or MDF to the TR(s), a plenum, twelve or twenty-four strand, 8.3/125um Singlemode fiber optic cable will be specified. An armored, plenum cable is specified for intra-building conductivity for this data applications. Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements.

- 8.3 /125-µm optical fiber, SM
- 12 or 24 strand
- Maximum Attenuation: 1.0/1.0 dB km at 1310/1550 nm.
- Tight buffered
- Plenum (OFNP) indoor rated
- Armored plenum construction
- Armored cable shall be grounded accordingly per manufacturer's warranty requirements.

Exception: with prior authorization only. Plenum indoor rated cable installed in a 1" innerduct, plenum rated and white or clear in color is an acceptable substitution if approved by the site representative prior to installation.

4.5.4 Inter-Building Fiber Optic Outdoor Backbone Cabling

4.5.4.1 Multimode Fiber Optic

The distribution of conductivity for building to building applications shall be a minimum of twelve-stands of 50/125um 10G multimode (LOMM / OM3) fiber optic cable will be specified if applicable. An outdoor or indoor/outdoor rated cable is specified for inter-building conductivity applications. Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements. If applicable, the Scope of Work will specify the requirements designated for the site installation.

- 50/125-µm optical fiber, LOMM / OM3
- 12 strand (minimum)

- Maximum Attenuation: 3.0/1.5 dB km at 850/1300 nm
- Minimum Bandwidth: 2000/500 MHz km at 850/1300 nm
- OFN or OFNR outdoor rated construction
- OFNR, or OFNP indoor/outdoor rated construction
- Hybrid construction (optional)

Exception: 62.5um fiber optic solution for special applications upon prior approval, since it may still be the existing infrastructure of many USCIS sites.

4.5.4.2 Singlemode Fiber Optic

The distribution of conductivity for building to building applications shall be a minimum of twelve-strands of 8.3/125um Singlemode (SM) fiber optic cable will be specified if applicable. An outdoor or indoor/outdoor rated cable is specified for inter-building conductivity applications. Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements. If applicable, the Scope of Work will specify the requirements designated for the site installation.

- 8.3 /125-µm optical fiber, SM
- 12 strand (minimum)
- Maximum Attenuation: 0.5/0.5 dB km at 1310/1550 nm.
- Loose Tube
- OFN or OFNR outdoor rated construction
- OFNR, or OFNP indoor/outdoor rated construction
- Hybrid construction (optional)

4.6 Fiber Optic Enclosures

Enclosures will be utilized for termination of the fiber optic backbone installed for data conductivity between the MDF and TR(s). The enclosure for the fiber optic cabling shall be installed in the equipment racks of both the MDF and TR(s). The enclosures shall be labeled accordingly for identification. The fiber enclosures are usually located at the top of the equipment racks for protection of the fiber optic cable and strands. Layout and elevation drawings will be provided for the enclosure location in the equipment rack(s). Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements.

- Shall be compliant in accordance with ANSI/TIA/EIA-568C specifications.
- Shall be 18 gauge steel, powder black.
- 2U in MDF with future growth (unless otherwise specified).
- 1U in TR locations (unless otherwise specified).
- Shall provide depth for high density termination and storage capabilities.
- Shall have transparent front hinged door to allow for ease of view inside enclosure.

- Shall have sliding trays for front and rear accessibility.
- All entry and exit points shall have grommets for cable protection and bend radius guides.
- All armored fiber optic cable shall be grounded per manufacturer's specifications.
- Design shall support six (6) or twelve (12) fiber SC duplex panels.
- Connector type shall be 568SC.
- Connector type mechanical or pre-terminated SC type.
- Meet the standard EIA-310 relay rack spacing specifications.
- Match manufacturer and design of existing facility installations. (The enclosure may be changed to match existing product type. Any deviation from the standard must be authorized.)
- Shall be available in LC, ST, etc. configurations upon prior approval only.

4.7 Equipment Racks & Swing Gates

The equipment racks acceptable for use in USCIS installations shall be of an open rack design, a standard 19 inches wide by 7 feet tall used in a floor mount configuration. Vertical cable management for equipment racks is mandatory and essential to provide a clean patching environment. When space considerations mandate, it is acceptable to use an open, wall-mounted equipment rack (swing gate). In these shared communications closets, open racks and swing gates may be used to meet the needs of the installation. If a wall mount configuration is used, the rack must be hinged, and space must be provided so that the rack can swing fully open and provide full access to the back of the rack.

- Shall conform to the ANSI/TIA/EIA standards.
- Shall be a 2-post - 7' x 19" configuration with grounding posts
- Conform to the standard EIA-310 mounting specification.
- Provide pre-tapped 10-32 threading with rack unit markings to indicate position.
- Provide a flexible modular concept.
- Provide combination front & rear vertical wire management with hinged covers attached to side of rack with a minimum of one pass through to go from front to back or vice versa.
- Provide combination front & rear horizontal wire management with hinged covers attached within the rack with a minimum of one pass through to go from front to back or vice versa.
- Provide floor mounting hardware except for swing gate style hardware.
- Design to support the weight of equipment and components specified for installation.
- Match make and model within existing facilities, where possible.
- Shall be individually grounded with AWG # 6 and per manufacturer's specifications.

*** See Exhibit 7 for a typical rack and cabinet structure.**

4.8 Supporting Tray and Hardware

All cables installed in overhead spaces (such as above ceiling panels) shall be supported with category-rated assemblies or basket trays that are fastened to the ceiling slab or structural steel to support the weight of the structured cabling system. Ladder runway shall be used to provide orderly arrangement of all installed cables in and around the equipment racks in the MDF & TR(s).

As a general rule, all cables shall be securely suspended and bundled with the appropriate assemblies (without damaging the outer cable jackets or creating kinks in the cable) to minimize the amount of space required for cabling and for neatness of cable routing.

4.8.1 Ladder Runway

A ladder runway system shall be utilized in the MDF and TR(s) for the management of horizontal and backbone cabling within the closets. The requested installation routing and size will generally be provided on layout drawings of the MDF and TR(s). The ladder runway shall be supported with the manufacturer suggested installation practices. Some design requirements include:

- Constructed of 3/8" x 1 ½" x .065" wall rectangular steel tubing
- Cross members welded at 12" intervals
- 18" & 24" in width (unless otherwise specified)
- Available in multiple widths - 6", 12", 18", 24", etc.
- Black in color
- Individually boxed to avoid scratches and damage
- Standard length of 9' – 11.5"
- Installed per manufacturer's specifications
- Installed with designed components to maintain cable bend radius (Radius Drop, etc.)
- Installed with supporting and mounting components (Radius bends, E-bend, Elevation, Wall Angle, Foot kits to include support of wall, floor, ceiling, etc. applications)
- Connected and coupled with designed components (Butt & junction splices, etc.)
- Bonding (Grounding & Earthing) should meet the standard requirements of J-STD-607 and manufacturer's specifications for warranty compliance.

4.8.2 Basket / Mesh Tray

A basket or mesh style of tray system shall be utilized in the facility ceiling space to distribute the structured cabling system through main distribution areas from the MDF and TR(s). **Also installed over MDF/Computer Rooms and TR's to support required slack loops above ceiling space.** The requested installation routing and size will generally be provided on prints of facility. The basket or mesh style tray system shall be installed and supported with the suggested manufacturer practices. Some design requirements include:

- Constructed of 5mm and 6mm diameter steel wire, welded on 2" x 4" intersections

- Available in multiple widths - 6", 12", 18", 24", etc.
- Available in multiple depths - 2", 4", 6", etc.

- Installed over MDF/Computer Rooms and TR's to support required slack loops above ceiling space.
- Zinc Electroplated finish (other colors available)
- Approved for plenum spaces
- Complete line of products, supporting hardware, accessories, etc.
- Installed per manufacturer's specifications
- Provide Under Floor application and supporting components
- Installed with designed components (Radius drop-outs, supports and wall brackets, etc.)
- Connected and coupled with designed components (splices, couplings, etc.)
- UL Classified as an equipment grounding conductor
- Bonding (Grounding & Earthing) should meet the standard requirements of J-STD-607-A and manufacturer's specifications for warranty compliance.

4.8.3 J-hook Assemblies

The category-rated j-hook assembly shall be utilized for the support of the structured cabling system upon exiting the basket or mesh style tray. This supporting assembly shall route the horizontal cabling to the designated drop location for the EO / TO. The assembly may also be used for routing of backbone cabling if a basket or mesh style of tray system cannot be utilized. The category-rated j-hook assemblies shall be installed and supported with the suggested manufacturer practices. Please refer to ANSI/TIA/EIA-568C standard for design and installation requirements. Some design requirements include:

- Provide the proper support of Category 6, etc. cabling
- Provide the proper support of innerduct, fiber optic and voice copper backbone cabling
- Complies with UL, NEC and EIA/TIA specifications & requirements for structure cabling systems
- Approved for plenum spaces
- Complete line of sizes, products, supporting hardware, accessories, etc.
- Galvanized finish (more corrosion resistant)
- Assembly retainer supplied for cable management **(NO TIE WRAPS)**
- Category-rated Loop assemblies approved for plenum spaces for cable support are acceptable upon prior approval

4.8.4 Velcro

Utilize Velcro fasteners for the management of all cabling components of the structured cabling system. **(Tie wraps are NOT acceptable in any application of the installation)**

- Available in various lengths (straps, puck, etc.)

. • Approved for plenum spaces

4.9 Cabinets & Enclosures

There are a multitude of equipment cabinets and enclosures that are acceptable for use in USCIS installations. In these shared telecommunications closets, cabinets, enclosures and swing gates may be used to meet the needs of the installation of servers, PBX equipment, etc. Please refer to ANSI/TIA/EIA-569 standard for design and installation requirements. The Scope of Work will specify the requirements designated for the site installation. Layout and elevation drawings will be provided with the location, patch panel, horizontal and vertical wire management and equipment configuration.

• Shall conform to the ANSI/TIA/EIA standards.

• Conform to the standard EIA-310 mounting specification.

• Provide pre-tapped 10-32 threading with rack unit markings to indicate position.

• Provide a flexible modular concept.

• Provide vertical wire management.

• Provide shelf with 4-post support.

• Provide floor mounting hardware except for swing gate style hardware.

• Match make and model within existing facilities, where possible.

• Design to support the weight of equipment and components specified for installation.

• Available in widths up to 26" inches or more.

• Available in depths up to 36 - 42" inches or more.

• Allow fan assembly installation.

• Lockable and offer matching key/lock design where multiple cabinets are installed.

• Are of a welded, uni-body construction.

• For areas located within seismic activity, meet Zone 4 earthquake vibration test conditions in accordance with National Electrical Bell Standards (NEBS) document.

• Installed per manufacturer's specifications.

• Available in wall mount configuration with swing-out cabinet body with pre-punched knock-outs.

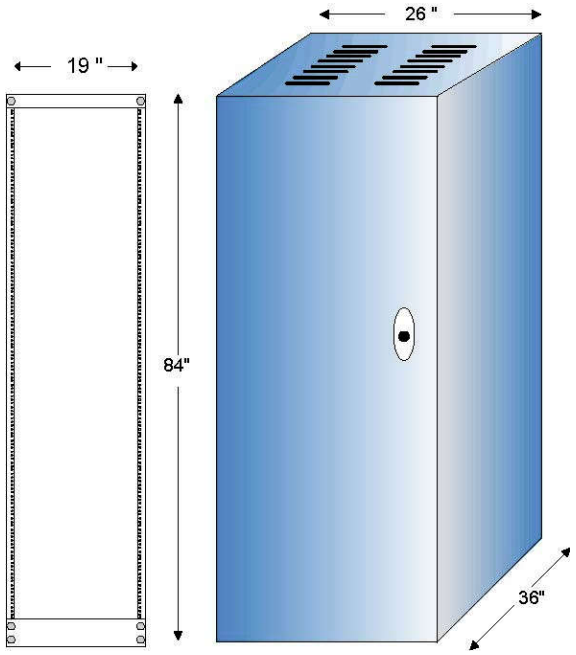
• Shall be individually grounded with minimum AWG # 6 and per manufacturer's specifications.

Note: All USCIS OIT and security cabinets must be grounded by the IT contractor accordingly with wire / components included in the Site Specific - Cable Plant S.O.W.

NOTE: Typically cabinets and enclosures are mobile on casters for serviceability, but may be required to be anchored accordingly due to local / state code requirements for earthquakes along with bonding / grounding.

*** See Exhibit 7 for a typical rack and cabinet structure.**

Exhibit 7: Typical Equipment Rack & Cabinet Enclosures



5.0 COPPER CABLE INSTALLATION SPECIFICATIONS

This section details the specifications that are to be used when installing all copper cabling. All work shall be ANSI/TIA/EIA–568C, ANSI/TIA/EIA-569, ANSI/TIA/EIA-606, NEC and IEEE standard specification quality (as applicable).

5.1 Horizontal Cables

These are the cables installed from a typical workstation location (EO / TO) back to a central point within a building or facility on each floor. Multi closets may be required depending on the square footage of each floor or on the number of floors of the building. These horizontal cables connect the EO / TO, back to a central point, within 90m of the closet, which will be the TR or MDF. Cables should never be exposed nor create any safety hazards for the public. All horizontal cables shall be of plenum construction, CMP.

All copper cables shall be positioned at a minimum distance of 4 inches from any EMI device (such as a light ballast, electrical motor, or power line). If contact is unavoidable, as in modular furniture applications, the horizontal cables shall not run more than 5 feet in parallel with the interference-generating medium. If traversing is necessary, all copper cables shall cross power lines and electrical conduits at a 90-degree angle to minimize interference.

Copper cables installed in a suspended ceiling environment shall at all times be self-suspended in the plenum air space by the use of a separate suspension system or installation in the building construction frame at the top of the permanent ceiling, if it exists. At no time shall cables be secured to the suspended ceiling grid, water pipes, or electrical conduits.

All cables should be installed as far above the suspended ceiling as possible, and should be supported with category-rated j-hook assemblies at staggered intervals of between 4 feet (4') and no more than five feet (5') per manufacturer's requirements. Utilize a dedicated basket / mesh cable tray system where available to support the cable. The key installation requirements are highlighted below.

- Install cable and supporting hardware in a neat and workmanlike manner.
- Install all horizontal cables in accordance with manufacturer's recommendations for warranty compliance.
- Ensure pulling tensions of cables are not exceeded.
- Maintain proper cable bend radius of 4 times the cable's outer diameter during placement.
- No splices are permitted.
- No link shall exceed 90 meters. Contractor is responsible for verifying proper footages.
- Shall utilize a star topology.
- Pull one additional "Mule Tape" or ¼" Nylon rope when pulling cables through any conduit utilizing existing pull string. (Replace all pull strings for future use.)
- Properly support horizontal cables in ceiling every 4'-5' using J-hooks and utilizing mesh cable tray and ladder tray where permissible.
- Supporting hardware for horizontal cables shall NOT utilize the suspended ceiling system, grid, tiles, etc., for support in any case.
- Place horizontal cables in pathways and spaces dedicated for communications cables with maximum fill ratio of 40% or per manufacturer specifications. See conduit fill chart below, Exhibit 8
- Provide 10' of slack at station end in ceiling and not inside wall and above IT Closet for future flexibility or relocation. Reference manufacturer's installation practices for warranty compliance.
- **Machine label all horizontal cables within 2" - 6" of termination at both ends of each cable with matching identification (cable) number.**
- When modular furniture poles are utilized for furniture applications, separation from power is mandatory with a divider or designated channel.
- Fire seal all sleeves and conduit openings after cable installation.

- Route all cables to backside of termination panels in an asymmetrical orientation to ensure cable bundles are split evenly (evenly split down the middle of patch panels in rear).
- Utilize Velcro fasteners. Tie wraps are NOT acceptable in any application of the installation.
- Utilize rear wire management bars for supporting cables into point of termination.
- Mount patch panels using supplied screws and ensure panels are at a straight 180 degree orientation.
- Contractor shall provide in a quick and timely fashion any additional materials or labor that may be damaged during the work at no charge to the owner.
- Label and document the horizontal cable installation to include labeling and pathways on the As-Built drawings.

Exhibit 8: Recommended cable fill ratio for conduit raceway (The chart below is only for reference. The manufacturer recommendations and installation practices for their particular product take precedence and may reflect in warranty specifications.)

Conduit Cable Fill Recommendations Based on Conduit and Cable Size

Conduit Size (in)	Cable Diameter (in)							
	0.18	**0.22**	**0.24**	**0.29**	**0.31**	**0.37**	**0.53**	**0.75**
1/2	1	1	0	0	0	0	0	0
3/4	5	4	3	2	2	1	0	0
1	8	7	6	3	3	2	1	0
1-1/4	14	12	10	6	4	3	1	1
1-1/2	18	16	15	7	6	4	2	1
2	26	22	20	14	12	7	4	3
2-1/2	40	36	30	17	14	12	6	4
3	60	50	40	20	19	17	7	6
3-1/2	82	69	56	26	26	22	12	8
4	107	91	73	34	34	28	14	11

5.2 Backbone Voice Multi-pair Copper Cable

Intra-backbone shall be installed to provide structured connectivity between closets (see Exhibit 11). The installation provides a star-topology cable infrastructure that is capable of supporting voice requirements between building floors or campus environment.

Intra-building, multi-pair copper backbone cabling is required to support voice services, however, the specifications and designs are determined by the specified site applications. This is due to the variety, funding, capacity and availability of voice services and designs.

Copper backbone may also be installed to support networking services, where distance limitations do not exceed the ANSI/TIA/EIA-568C specifications. Copper backbone cabling provides a redundant connectivity option in the event of a catastrophic fiber failure, and shall be installed where voice and data closets are physically separated.

The key voice intra-building, multi-pair copper backbone installation requirements are highlighted below.

- Install all intra-building cabling and components in a neat and workmanlike manner.
- Cabling shall utilize a star topology with no more than 2 levels of backbone.
- Copper backbone cable length shall not exceed 500 meters for the 1st level and 300 meters for the 2nd level for a total not to exceed distance of 800 meters.
- Install all copper backbone cables in accordance with manufacturer's recommendations.
- All backbone communications cables shall be installed in pathways and spaces designated for communications cables
- Ensure pulling tension of copper cables do not exceed a pull load of 25 foot pounds.
- No splices are permitted in any copper cable.
- Pull one additional "Mule Tape" or ¼" Nylon rope when pulling cables through any conduit.
- Properly support backbone cables in ceiling every 4'- 5' using J-Hooks or mesh cable tray where available.
- Provide 20' of service loop at both equipment closet ends if applicable.
- Terminate and support all cables to avoid strain on terminating equipment.

- Terminate all pairs and conductors at both ends according to manufacturer's instructions following color code sequence.
- Neatly and permanently label all backbone cables with the cable number at both ends.
- Utilize Velcro fasteners. Tie wraps are NOT acceptable in any application of the installation.
- Fire seal all sleeves and conduit openings after the cable installation are complete.
- The multi-pair voice backbone cables shall be utilized to extend PBX extensions and shall be terminated on patch panels to accommodate the application. The multi-pair cable will be terminated only the center pairs, 4 & 5, which will utilized the white/blue & blue/white pairs on the patch panels to extend dial tone from the PBX in the MDF to the TR(s). The cross-connecting will utilize patch cables for this application.
- Test voice backbone pairs for continuity and wire-map with a Fluke Level V or greater tester within calibration period. Supply documentation of calibration and serial number(s) with test results.
- Contractor shall provide in a quick and timely fashion any additional materials or labor that may be damaged during the work at no charge to the owner.
- Label and document the backbone cable installation to include labeling and pathways on the As-Built drawings.

5.3 Patch Cables (Workstation / Drop location)

The workstation patch cable connects the end user devices (personal computer, terminals, etc.) to the EO / TO. For most installations, these patch cables will be provided and left on-site for the deployment team or local IT to install when setting up workstations. The workstation patch cable is generally ten feet (10') but may specify a different length as long as the overall total length of the workstation patch cable, horizontal cabling, and the patch-panel patch cable do not exceed 100 meters (328 feet). The patch cables are manufacturer specific in standard one-foot incremental lengths and shall match the conductivity components for the best channel performance.

- Install all patch cables in accordance with manufacturer recommendations.
- Utilize Velcro fasteners. Tie wraps are NOT acceptable in any application of the installation.
- Maintain proper cable bend radius of 4 times the cable's outer diameter during placement.

- Patch cables shall never create a trip hazard or other risk to equipment, services or personnel.
- Patch cables shall be CMP plenum-rated for applications (Overhead Paging, Reservation Systems, etc.) above the ACT in the plenum.
- The appropriate colors are to be used to patch equipment as specified in Exhibit 5.

5.4 Patch Cables (Panel)

The patch-panel cable connects the horizontal cable port to the voice and data electronics within a central wire center or closet, typically a TR or MDF. These cables are identical to the workstation cables and are certified by the manufacturer of the conductivity components. It is the cable installer contractor's responsibility for patching all active cable locations into active ports, unless otherwise directed by the USCIS manager or designated representative. Utilization of wire management and organization is important to facilitate troubleshooting, repair, and documentation and, as such, there are key elements to ensure patch cords are properly installed. The following requirements shall be followed for patching workstation ports to the electronics.

- Install all patch cables in accordance with manufacturer recommendations.
- Utilize Velcro fasteners (tie wraps are NOT acceptable in any application of the installation.
- Maintain proper cable bend radius of 4 times the cable's outer diameter during placement or have kinks.
- Ensure patch panels have horizontal wire management above and below the panels. Note: Network switches may be mounted above and below as specified in provided drawings which utilize shorter patch cable lengths.
- Machine-printed labels must be applied to both ends of the patch cables for ease of identification. Utilize provided number sequence.
- Utilize patch cables with machine-printed labels on each end which have been assembled by the manufacturer if applicable. Utilize provided number sequence.
- Patch cables must be dressed utilizing available horizontal and vertical wire management in accordance with manufacturer recommendations.
- Patch cables shall utilize the left and right vertical wire management to reduce cable patch congestion and provide an even cable distribution on the front of the equipment rack.
- Patch cables shall never create a trip hazard or other risk to equipment, services or personnel.

- The appropriate colors are to be used to patch equipment as specified in Exhibit 5.

5.5 Copper Cable Termination

This section applies to both the workstation and closet cable termination practices. All copper cable terminations shall conform to ANSI/TIA/EIA-568C standards. The key installation requirements are highlighted below.

- Install all components in a neat and workmanlike manner.
- Install all horizontal cables and termination frames in accordance with manufacturer's recommendations.
- Ensure terminations are at 180 degrees to the jack with no more than ¼" un-twisting and no more than ½" un-jacketing.
- Ensure terminations have no un-twisting and that tower separators are utilized to separate pairs.
- Pin/Pair assignments shall follow the T568B configuration. (see Exhibit 9 below)
- All four pairs must be terminated.
- Maintain proper cable bend radius of 4 times the cable's outer diameter during placement.
- Terminate all pairs and conductors at all ends according to manufacturer's specifications in accordance with warranty compliance following color code sequence.
- No link shall exceed 90 meters. Contractor is responsible for verifying proper footages. **Exception – 100 meters if Cat 6e is installed per manufacturer's requirements to meet the required warranty.**
- **Machine-printed labels shall be applied to all horizontal cables with the designated cable number at both ends within 2"– 6" of termination point.**
- Machine-printed labels shall be installed on all faceplates and termination panels with associated cable identification numbers.
- Utilize Velcro fasteners (tie wraps are NOT acceptable in any application of the installation.

- Contractor shall provide in a quick and timely fashion any additional materials or labor that may be damaged during the work at no charge to the owner.
- Test and certify all cabling with a Fluke Level IV or greater tester within calibration period. Supply documentation of calibration and serial number(s) with test results upon completion of installation.

- Label and document the horizontal cable installation to include labeling and pathways on the As-Built drawings.

Exhibit 9: T568B Pair/Pin Assignments

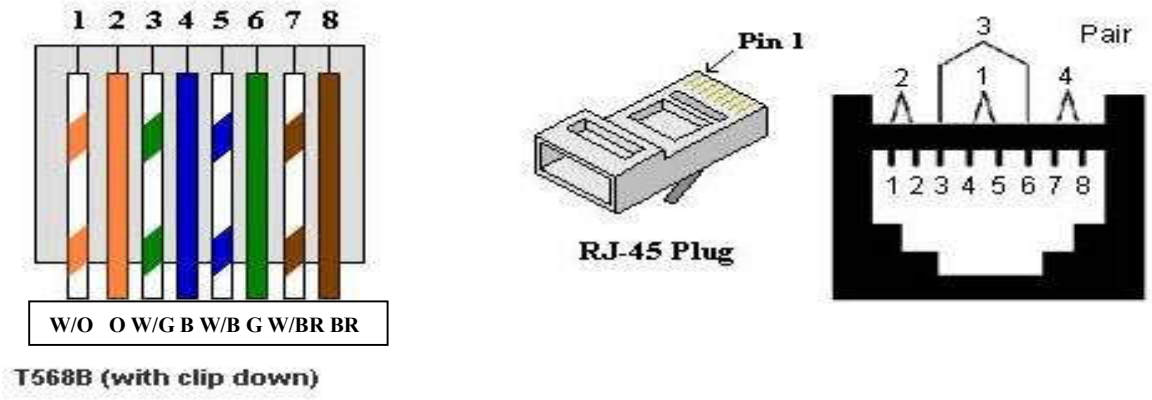
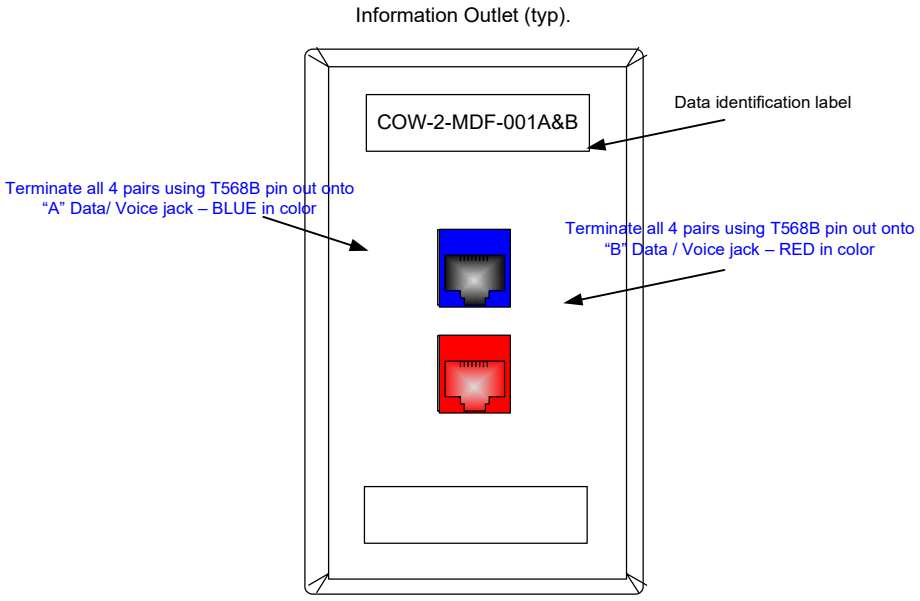
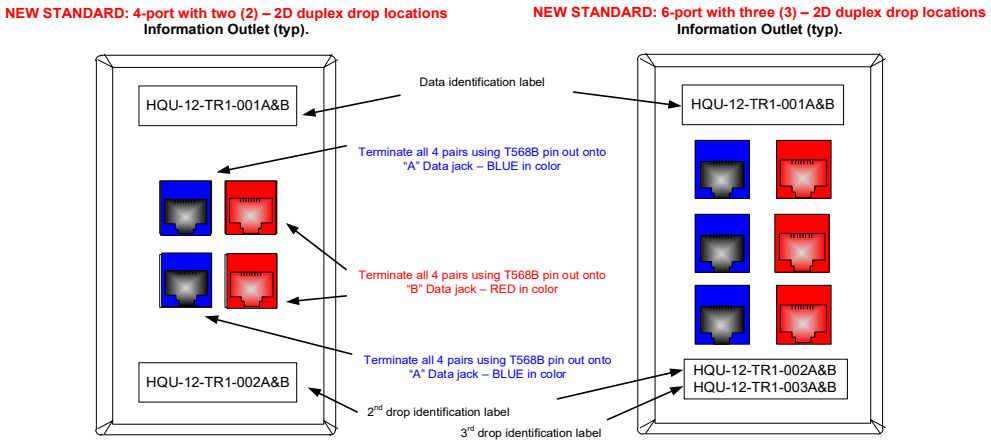


Exhibit 10: Example: Flush wall outlet "CURRENT" 2D – DUPLEX DROP STANDARD





6.0 INSTALLATION OF OPTICAL FIBER CABLES AND CONNECTORS

This section provides the specifications to be used when installing all optical fiber cabling. All fiber optic installation and termination shall conform to ANSI/TIA/EIA-568C standards. All work shall also comply with ANSI/TIA/EIA–568C, ANSI/TIA/EIA-569, ANSI/TIA/EIA-606, TIA-455, TIA-492, TIA-526-14-A for multimode and TIA-526-7 for singlemode, NEC and IEEE standard specification quality (as applicable).

6.1 Backbone Fiber Optic Cable

The optical fiber backbone cable shall connect each TR (remote wiring closet) to the MDF. The fiber strand count shall be a minimum of 12 strands, multi-mode, 50/125 µm optical LOMM OM3 fiber cable with graded index, 250 or 900 µm buffer, with contiguous, 2-feet, segment-length markers printed on the cable jacket. All intra-building backbone fiber optic cables shall be an armored plenum construction or plenum (OFNP) cable installed in a (CMP) plenum-rated innerduct. All inter-building backbone fiber optic cables shall be installed in conduit.

Fiber-optic cable shall not share conduits with copper medium unless separation between copper and fiber is maintained. For large campus or complex backbone fiber installations where multiple conduits or pathways exist, fiber-optic cable shall be separated from the copper cable installation, wherein fiber-optic cable is dedicated to one conduit, copper to another. In retrofit or existing buildings, where pathways are insufficient to maintain separation between copper and fiber, USCIS OIT shall review and approve the design prior to installation.

All optical fiber cables shall be light tested prior to installation. This is typically done while the cable is still on spools or reels and only ensures all strands pass light prior to pulling cable into conduits and pathways. All fiber optic strands of backbone cabling shall be terminated with the appropriate SC connectors, unless specified otherwise, and capped with a dust boot. All strands shall be tested bi-directional (both directions) with a Fluke Level V or greater tester. The key installation requirements are highlighted below.

- Install all fiber optic cabling and components in a neat and workmanlike manner.
- Optical fiber cable length shall not exceed 300 meters.
- Install all fiber optic backbone cables in accordance with manufacturer's recommendations.
- All backbone communications cables shall be installed in pathways and spaces designated for communications cables.
- All optical fiber cables shall be of the interlocking plenum CMP armor design for protection or appropriately plenum-rated CMP plastic tubing (innerduct) upon prior approval from USCIS.
- Ensure pulling tension of optical fiber cables do not exceed a pull load of 50 foot pounds.
- Optical fiber cables shall support a bend radius of 10 times the cable outside diameter when not subject to tensile load, and 15 times the cable outside diameter when subject to tensile loading up to the cable's rated limit.
- Contractor shall provide in a quick and timely fashion any additional materials or labor that may be damaged during the work at no charge to the owner.
- Pull one additional "Mule Tape" or ¼" Nylon rope when pulling cables through any conduit.
- Properly support backbone cables in ceiling every 4'-5' using J-Hooks or cable tray.
- Provide 20' of service loop at both equipment closet ends.
- Terminate and support cables to avoid strain on terminating equipment.
- Neatly and permanently label all backbone cables with the cable number at both ends.
- Terminate all pairs, conductors and strands at all ends according to manufacturer's instructions following color code sequence.
- Utilize Velcro fasteners. Tie wraps are NOT acceptable in any application of the installation.
- Label all fiber pairs using the 568SC method.
- Fire seal all sleeves and conduit openings after the cable installation is complete.

- All optical fiber cable shall be installed in the fiber panels in accordance with the manufacturer's instructions.

- Field test instruments for multimode and singlemode fiber optic cabling shall meet the requirements of TIA-526-14-A & and TIA-526-7.

- When using a mandrel wrap, the reference jumper should be wrapped in five non-overlapping turns around a smooth round mandrel (rod) during the reference calibration of the source to the detector and for all loss measurements in accordance with TIA-568C and TIA-455.

- Link attenuation testing shall use the One Reference Jumper Method specified by TIA-568C along with TIA-526-14-A for multimode and TIA-526-7 for singlemode.

- Link attenuation does not include any active devices or passive devices other than cable, connectors, and splices.

- The backbone optical fiber cabling link segment shall be tested in both directions at both operating wavelengths of 850 nanometers and 1300 nanometers to account for attenuation deltas associated with wavelength for multimode.

- The backbone optical fiber cabling link segment shall be tested in both directions at both operating wavelengths of 1330 nanometers and 1500 nanometers to account for attenuation deltas associated with wavelength for singlemode.

- Total loss budget for any fiber Channel shall not exceed 2.0 dB.

- Splices are not permitted. If applicable, spliced optical fiber cables shall not exceed .3 dB.

- If applicable, because backbone length and the potential number of splices vary depending upon site conditions, the link attenuation equation (1) should be used to determine acceptance values based upon this Standard's component requirement at each of the applicable wavelengths.
    - *Link Attenuation Allowance (db) = Cable Attenuation Allowance (db) + Connector Insertion loss Allowance (db) + Splice Insertion loss Allowance (db)*
    - *Where: Cable Attenuation Allowance (db) = Maximum Cable Attenuation Coefficient (db/km) x Length (km)*
    - *Where: Connector Insertion Loss Allowance (db) = Number of Connection Pairs x Connector Loss Allowance (db)*
    - *Where applicable: Splice Insertion Loss Allowance (db) = Number of Splices x Splice Loss Allowance (db)*

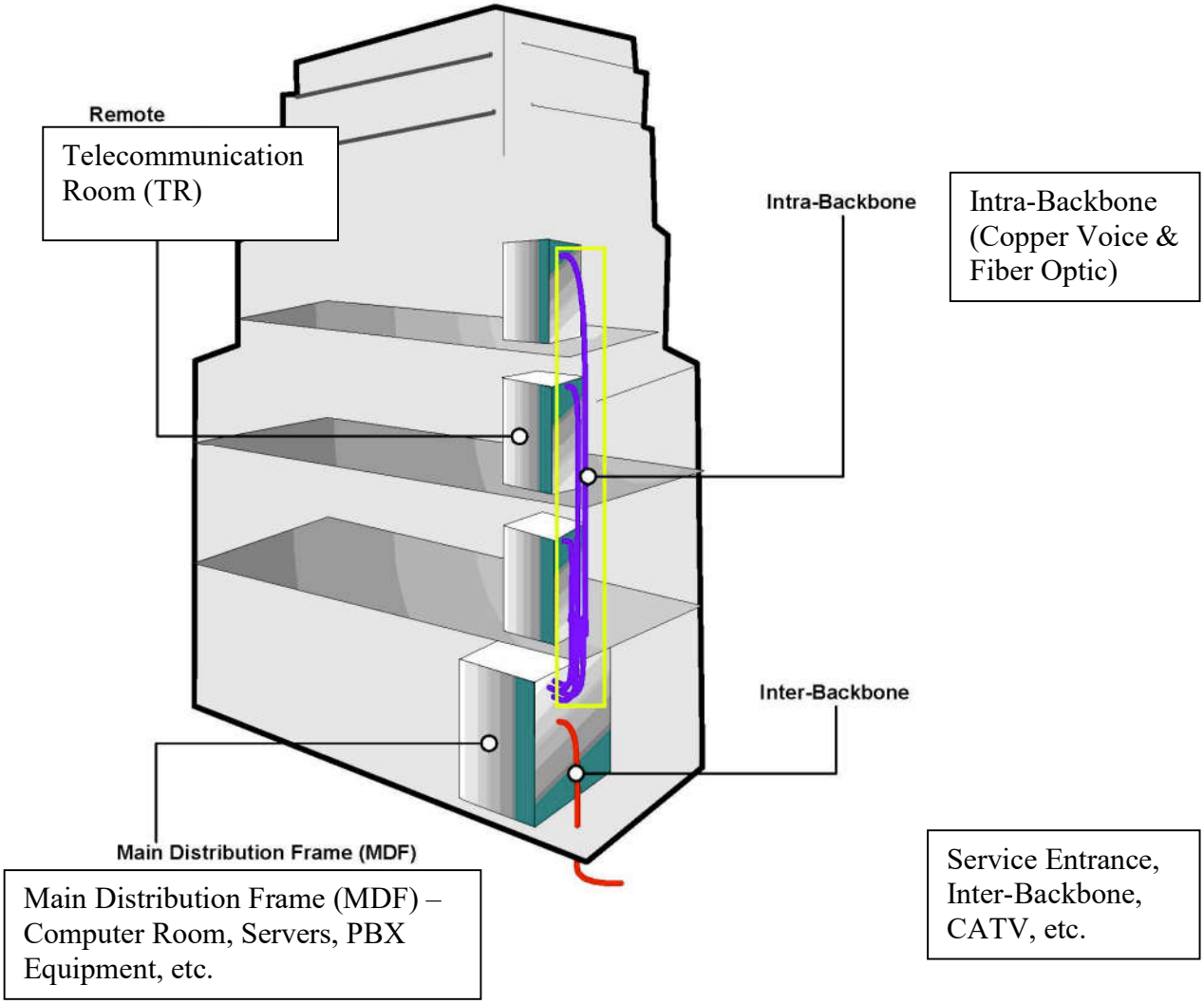
- If applicable, ensure that all splice closures for optical fibers are properly sealed for protection of the cable and splices. Label the splice location(s) accordingly.

- Contractor shall provide in a quick and timely fashion any additional materials or labor that may be damaged during the work at no charge to the owner.

- Test and certify all cabling with a Fluke Level V or greater tester within calibration period. Supply documentation of calibration and serial number(s) with test results upon completion of installation.

- Label and document the horizontal cable installation to include labeling and pathways on the As-Built drawings.

Exhibit 11: Typical Fiber Optic & Voice Copper Building Backbone



6.2 Horizontal Workstation Fiber Optic Cable

If the application is required, the fiber horizontal workstation cable connects the workstation to the TR. The cable shall be a two (2) – six strand, multi-mode, 50/125 µm LOMM OM3 optical fiber cable with graded index 250 or 900 µm buffer with contiguous, 2-foot, segment-length markers shall be printed on the cable jacket. The bend radius of any optical fiber cable installed shall be at least eight times the outside diameter of the cable. All horizontal fiber optic cables shall be an armored plenum construction or plenum (OFNP) cable installed in a (CMP) plenum-rated innerduct. Pulling tension for optical fiber cables must adhere to and not exceed manufacturer specifications. All fiber optic strands of the horizontal cable shall be terminated with the appropriate SC connectors and capped with a dust boot. A module adapter for the EO / TO faceplate shall accommodate the duplex SC termination. **Note: Under special circumstances, LC duplex connectors and panels may be utilized upon prior approval from USCIS (Example: service provider fiber from the Building Demarcation).**

EXCEPTION: 62.5um fiber optic solution for special application upon prior approval.

6.3 Fiber Optic Cable Jacket

All fiber optic installations shall use optical cable with a plenum-graded jacket that is marked with a UL rating of "OFNP" or equivalent.

Exhibit 12: Fiber optic jacket color reference chart

Common Industry Jacket Colors	
Single-mode (SM)	**Yellow**
Multimode (MM)	**Orange / Slate**
Laser Optimized	**Aqua**

6.4 Fiber Optic Connector

The optical fiber connector for workstation or backbone connections shall follow the ANSI/TIA/EIA standards for installation. The optical fiber connector shall be SC type connectors for workstation and/or backbone installation.

In retrofit buildings, fiber connectors should match the existing installed connectors unless otherwise specified.

- Comply with Section 4.6 per recommended manufacturer specifications for termination and testing.

Note: Under special circumstances, LC duplex connectors and panels may be utilized upon prior approval from USCIS or a requirement listed in the Cable Plant S.O.W. (Example: Service Provider armored fiber from the Building Demarcation or a HSDN / Talon Room).

Exhibit 13: TIA / EIA 568C Requirements for Duplex SC Standard Configuration

Attenuation Loss (per mated pair)	< .75 dB
MM Return Loss @ 850/1300 nm	> -20 dB
SM Return Loss @ 1310/1550 nm	> -26 dB
3.0mm Jacketed Cable Retention @ 0 degrees	15 lbs.
3.0mm Jacketed Cable Retention @ 90 degrees	4.4 lbs.
900 micron (Distribution) Cable Retention @ 0/90 degrees	.50 lbs.
250 micron (Bare) Fiber Retention @ 0/90 degrees	.50 lbs.
Operating Temperature	0 to +50oC
Bandwidth	NONE
Connector performance at Equipment Interface	NONE

6.5 Fiber Optic Cable Termination

All optical fiber cables shall be light tested prior to installation. This is typically done while the cable is still on spools or reels and only ensures all strands pass light prior to pulling cable into conduits and pathways.

The minimum termination shall be two strands for a horizontal cable. When installing fiber-optic backbone cabling, all strands will be terminated with the appropriate connectors and capped with a dust boot. All strands shall be terminated and tested.

All optical fiber cables shall have a twenty (20) foot storage coil (wrapped in an appropriately sized loop for the minimum bend radius of the cable) positioned at each end, where possible before being terminated with connectors. All intermediate slack in the optical fiber cable shall be loosely coiled and suspended to avoid hard bends or kinks.

- Comply with Section 4.6 per recommended manufacturer specifications for termination and testing.

Exhibit 14: Fiber optic strand color reference chart

Color Codes: Fiber Optic Strands			
Sequence Number	Color	Sequence Number	Color
1	Blue	7	Red
2	Orange	8	Black
3	Green	9	Yellow
4	Brown	10	Violet
5	Slate	11	Rose
6	White	12	Aqua

Exhibit 15: Fiber optic wavelength reference chart

Transmission Wavelengths of Various Fiber Optic Cabling		
Type	Fiber Size	Transmission Wavelength
Multimode	62.5/125	850nm 1300 nm
Multimode	50/125	850nm 1300 nm
Single-mode	8.3/125	1310nm 1550nm

Exhibit 16: Fiber optic application & distance reference chart

Application	Data Rate (bps)	Source Type(s)	Laser Optimized 50 Micron 2000/500 MHz/km	Typical 50 Micron 500/500 MHz/km	Typical 62.5 Micron 200/500 MHz/km	Single mode 8 – 9 Micron
10BASE-FL	10 M	*850 nm LED*	1,250	1,250	2,000	Not Supported
100BASE-SX	10/100 M	*850 nm LED*	300	300	300	Not Supported
100BASE-FL	100 M	1300 nm LED	2,000	2,000	2,000	Not Supported
1000BASE-SX	1 G	*850 nm VCSEL*	900 – 1,000	550	275	Not Supported
1000BASE-LX	1 G	1310 nm FP or VCSEL	600	550	550	5,000
10GBASE-SR	10 G	*850 nm VCSEL*	300	82	33	Not Supported
10GBASE-LR	10 G	1310 nm DFB	Not Supported	Not Supported	Not Supported	10,000
10GBASE-LX4	10 G (4x2.5 G)	Four 1310 nm DFBs	300	300	300	10,000
Video					5,500	38,000

7.0 EQUIPMENT RACK

There are a multitude of equipment racks and cabinets that are acceptable for use in USCIS installations. In these shared Computer / Telecommunication Rooms, the open racks, cabinets and swing gates may be used to meet the needs of the installation. When open racks or swing gates are used, they shall be located within the Computer / Telecommunication Rooms and shall provide structural support for the patch panels and required electronics. The open rack will be a standard 19 inches wide by 7 feet tall when used in a floor mount configuration. When space considerations mandate, it is acceptable to use an open, wall-mounted equipment rack (swing gate). If a wall mount configuration is used, the rack must be hinged, and space must be provided so that the rack can swing fully open and provide full access to the back of the rack.

All floor or wall-mounted equipment racks, cabinets and swing gates installed in earthquake-prone geographic areas shall be installed in compliance with specific seismic guidelines, regulations and codes. Special attention must be taken to ensure the proper installation techniques are followed to minimize risk to electronics and cable plant, and most importantly prevent the mounting hardware from toppling over during seismic activity. Floor mounted racks and cabinets shall have a minimum of 36 inches of clearance in front of, behind, and on at least one side. Where space or room layouts limit the minimum clearances required, the installation contractor shall notify the OIT designated representative for technical direction.

Equipment shall be mounted on the rack via holes in the frame or by using mounting hardware that conforms to the EIA-310 mounting-hole spacing standard. As an alternative for non-rack devices, equipment may be placed on flat shelves that are attached to the rack. All racks shall be secured either to the floor or wall with bolts or other fasteners that are rated to withstand the recommended weight limits and shear loads for the rack. Each rack shall include all mounting and assembly hardware (such as nuts and bolts) for full configuration use.

All racks will be bonded (grounded / bonded) to appropriate TMGB or TGB (Telecommunication Main Grounding Busbar) with a minimum #6 AWG green ground wire with required lugs. When multiple racks and/or cabinets are used and they are butted together in the closet, they shall be bolted together for additional stability. Each enclosure and equipment rack shall be bonded to the TGB separately with individual #6 AWG green ground wire and lugs. Bonding shall be in accordance with J-STD-607 for installation and the ANSI/TIE/EIA-606 standards for labeling.

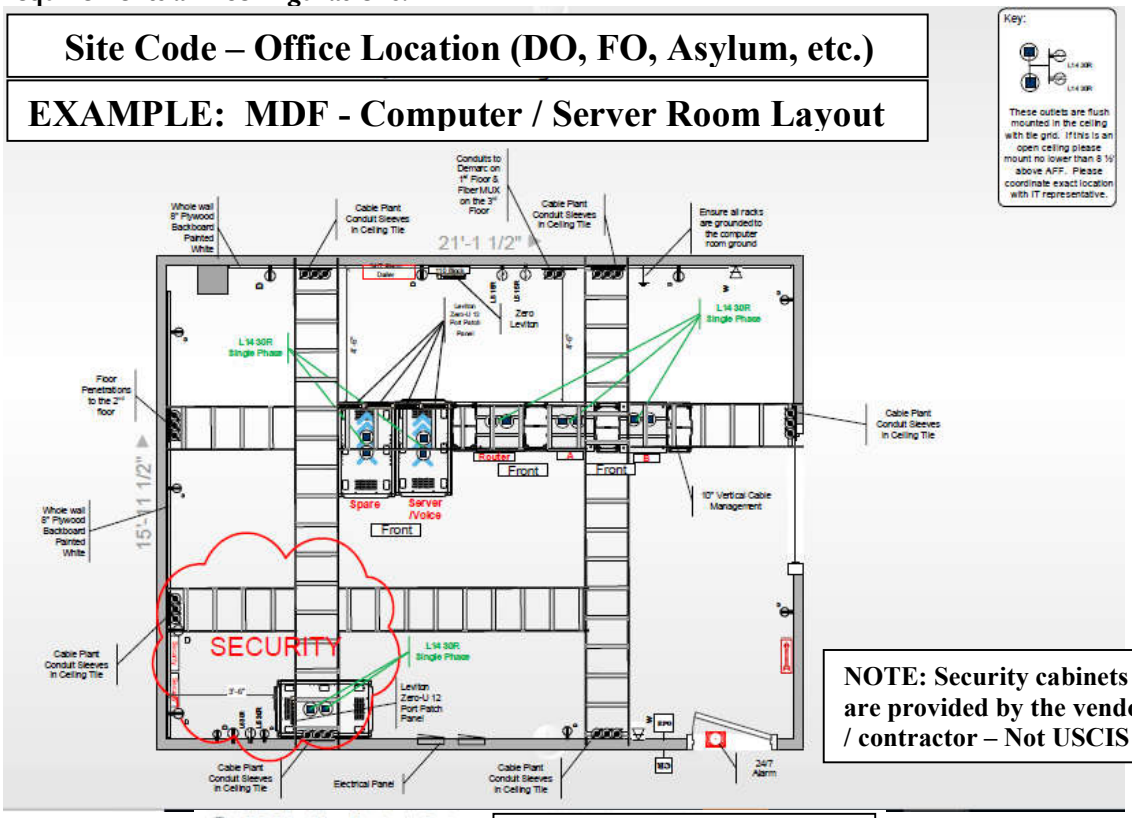
Equipment layout, specifically with respect to rack, cabinet, and swing gate location are critical design elements that ensure future growth, maintenance and flexibility are protected. Proper clearances also allow installers and maintenance personnel the required room to perform work safely and ensure electronics environmental conditions are maintained.

The patch cables shall run neatly through the horizontal and vertical wire management panels to the appropriate electronics and port. The cables between the patch panels and the electronics shall not be excessively long nor shall they lie on the floor. The patch cables shall be secured and bundled using Velcro securing straps.

A PDU (Power Distribution Unit) with surge suppression, network connection capability and an on/off switch shall be mounted to the back of the rack to supply at least ten outlets for AC power (120-volt, 20-amp service) which will be plugged into the UPS unit specified. The key installation requirements are highlighted below.

- Assemble free standing racks according to manufacturer's instructions.
- Verify that equipment mounting rails are sized properly for rack-mount equipment before attaching the rack to the floor. All fiber optic cabling and components in a neat and workmanlike manner.
- All racks must be attached to the floor in four places using appropriate floor mounting anchors. When placed over a raised floor, threaded rods should pass through the raised floor tile and be secured in the structural floor below.
- Racks shall be bonded (grounded) to the Telecommunication TMGB connected to the TBB bus bars located in the MDF and TR(s) TGB using minimum #6 AWG green insulated solid copper wire and any necessary attachment hardware provided by the Installer Contractor in accordance with the J-STD -607 and ANSI/TIE/EIA-606 standards.
- The equipment load should be evenly distributed and uniform on the rack. Place large and heavy equipment towards the bottom of the rack. Secure all equipment to the rack with equipment mounting screws.
- Mount the PDU (Power Distribution Unit) or rack mount power strips within 6' of where the UPS (Uninterruptible Power Supply) equipment will be placed. If applicable, quantities and designated locations within equipment rack will be shown in provided elevation drawings.

Exhibit 17: Example – MDF /Computer Room Equipment Racks and Enclosures Elevation with patch panel, vertical and horizontal wire management, shelves, PDU, UPS, Network Switches, PBX, Servers, remote server 12-port patch panels, etc. & Room Layout below with Ladder Runway, equipment rack, cabinet, electrical panel, outlet, EPO, CR, security, plywood, etc. requirements and configurations.



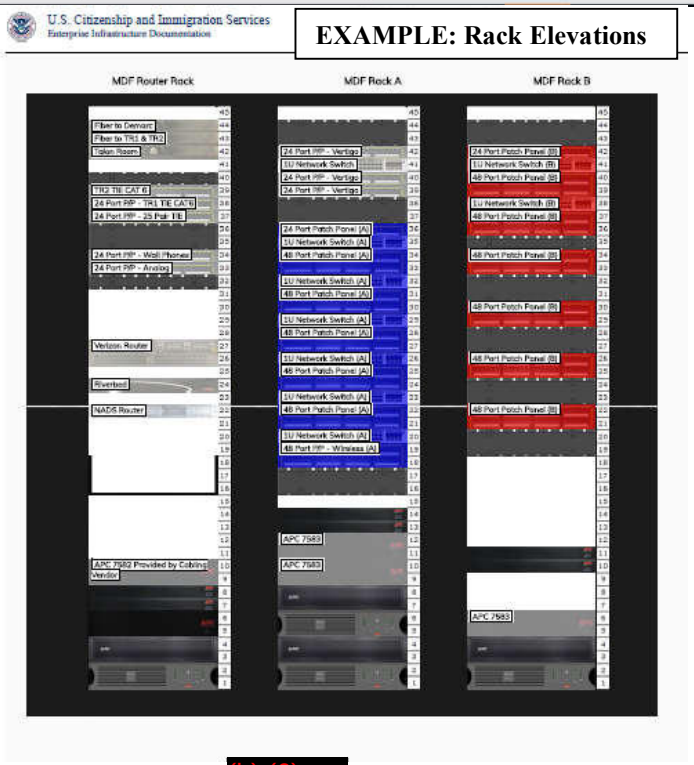
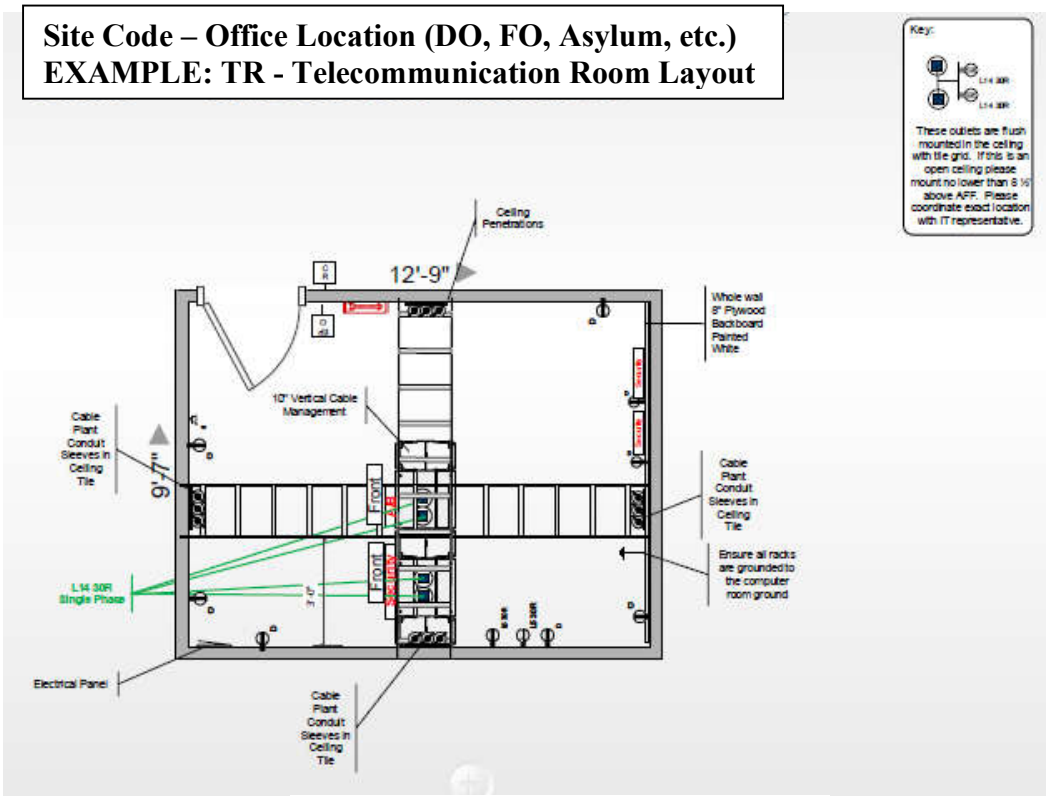


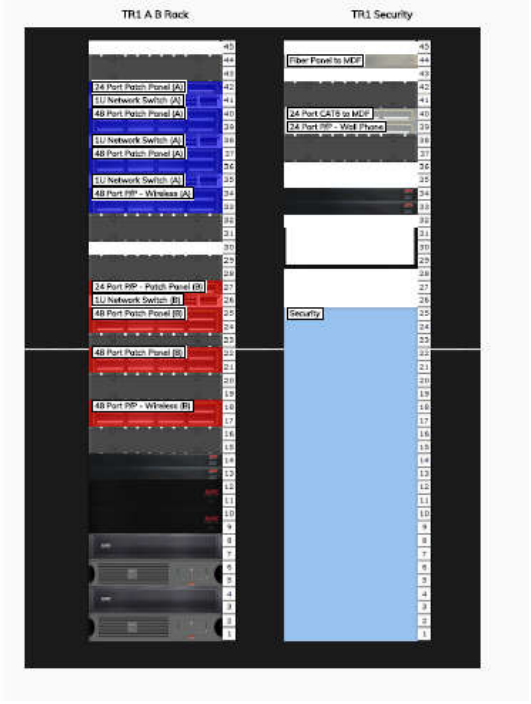
Exhibit 18: Example – TR (Telecommunication Room) Equipment Rack Elevation with patch panel, vertical and horizontal wire management, PDU, UPS, Network Switches, etc. & Room Layout below with Ladder Runway, equipment rack, cabinet, electrical panel, outlet, EPO, CR, security, plywood, etc. requirements and configurations.

Site Code – Office Location (DO, FO, Asylum, etc.)
EXAMPLE: TR - Telecommunication Room Layout



U.S. Citizenship and Immigration Services
Enterprise Infrastructure Documentation

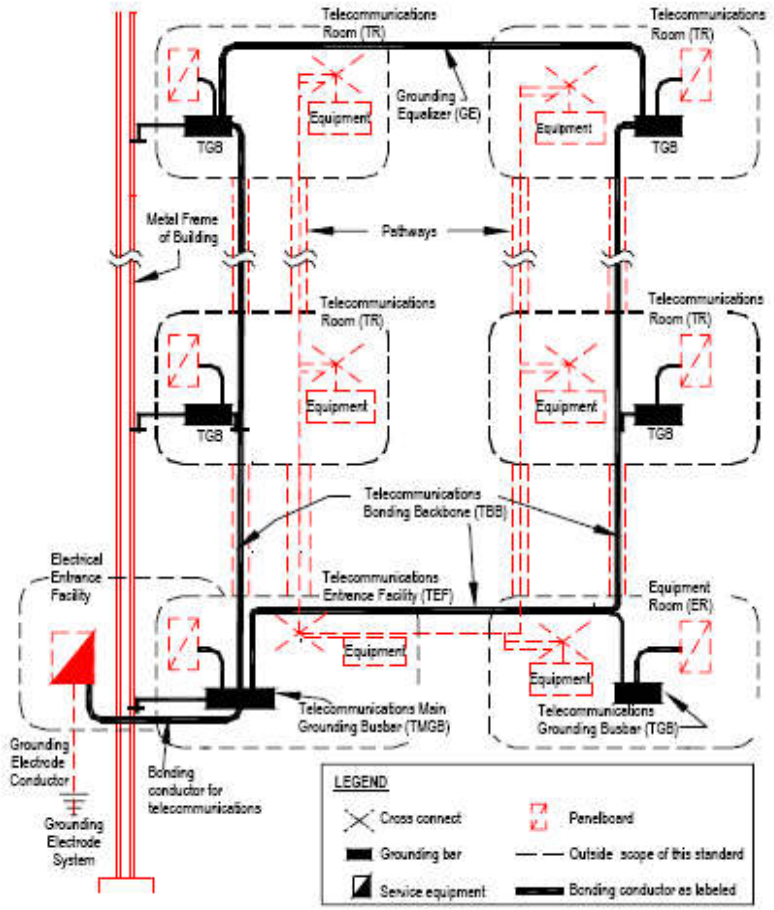
EXAMPLE: TR – Rack Elevations



8.0 BONDING & GROUNDING (EARTHING)

Due to the advancements in technology, a reliable electrical ground reference potential is required for protecting active electronics. Bonding or grounding to the nearest building steel, iron pipe, etc. is no longer a satisfactory or acceptable. The standards provide the design and proper installation to ensure these requirements. The installation of the telecommunication bonding and grounding system shall follow the requirements in accordance with J-STD-607-A for installation and the ANSI/TIE/EIA-606 standards for labeling. The NEC (National Electrical Code) also provides guidelines to ensure that electrical installations in buildings meet the necessary safety practices to prevent electrical shock hazards to personnel, ensure fault clearance of unintentional electrical breakdowns that could cause fire, and prevent transient voltages from causing electrical damage to installed network components. Installations shall also be in accordance with local and state codes as well.

Exhibit 19: Bonding & Grounding reference diagram for Commercial Building Installation



TIA/EIA-J-STD-607-A

Exhibit 20: Specifications for sizing of the TBB

TBB Length Linear Feet (meter)	TBB Size (AWG)
Less than 13' (4)	6
14' – 20' (4 - 6)	4
21' – 26' (6 – 8)	3
27' – 33' (8 – 10)	2
34' – 41' (10 – 13)	1
42' – 52' (13 – 16)	1/0
53' – 66' (16 – 20)	2/0
Greater than 66' (20)	3/0

NOTE: USCIS expectation is that # 3/0 + AWG - TBB will be extended from the Main Electrical Building Entrance to the MDF / Computer Room TMGB with a secondary ground connection, # 4 + AWG to building steel. If applicable, an AWG 3/0 + TBB will be extended to each of the Telecommunication Rooms (TR's) TGB from the MDF / Computer Room TMGB along with a secondary ground connection, AWG # 4 + to building steel to each TGB, which are typically installed by the electrical contractor for LAP projects. All bonding / grounding requirements within the Computer Room and TR's shall be installed by the awarded cabling contractor to include each equipment rack separately, ladder runway sections, armored fiber optic cable, etc., with a # 6 + AWG. The electrical contractor is also required to ground / bond the basket tray accordingly per the manufacturer's specifications.

9.0 ADMINISTRATION AND LABELING CONVENTIONS

Label conventions shall apply to all sites, regardless of the number of buildings at the site. This section describes the USCIS standard labeling convention for all cable installations, whether new or retrofit.

9.1 Building Designation

The designation for the building shall be a two to four character alphanumeric scheme. The designation is assigned by USCIS facilities and is generally three characters (Ex. HQU – WA Headquarters). Buildings typically have unique names/numbers, whether in multi-story complexes or in campus environments. The first designation should represent the unique building the cable plant is wired within. This nomenclature will rarely change throughout the life of the building and allows a structured naming convention to be used for Inter & Inter-building backbone cable installations as well.

9.1.1 Floor

The designation for the floor shall be a two-digit number. If the floor is a single number such as "4," place a leading zero before the single-digit, for example "04."

9.1.2 Computer & Telecommunications Rooms (Remote Wiring Closets)

The designation for a wiring center is a single letter. The Computer / LAN Room or MDF shall always have the designation of "MDF." Telecommunication Rooms (Remote Wiring Closets) shall be labeled TR1, TR2, etc.

9.1.3 Cable Numbers

The Equipment Outlet (EO) / Telecommunication Outlet (TO) designation for the cable shall be a three-digit number, followed by an "A" and "B" (If applicable "C"). This designation indicates the "A" and "B" (If applicable "C") cable for that drop. For example, the designation for drop # 3A would become 003A.

The single wall phone designation for the cable shall be a three-digit number, followed by a "W", which will be terminated on a separate 24-port patch for single voice drop locations. For example, the designation for wall phone # 3 would become 003W.

Exception: "D" may be applied for special application for training room requirement, etc. (gray in color)

9.2 Equipment Outlet / Telecommunication Outlet

The EO / TO is the interface for the workstation cable and the horizontal workstation cable, that terminates in a wiring closet. This is typically referred to as the "jack" in the industry, also an enhancement to the Bell Labs Universal Service Order Code (USOC) specifications. These specifications also referenced the RJ pin assignments. The ANSI/TIA/EIA now prefers to use the term 8-pin modular plug or connector when describing jack pin-outs. Each equipment outlet should be labeled according to the following guidelines:

The designations on single-gang and double-gang faceplates will be as follows:

- Building (HQU, or combination).
- Floor (12, leading with zero if single digit).
- Wiring center /closet (TR1).
- Cable drop (001[A&B], leading zero(s) for total of three digits).

For example: "HQU-12-TR1-111A"
Site location: HQU = WA Headquarters building, 12 = 12th floor, TR1 = Telecommunication Room, and 111A = cable drop #111 cable A.

Single wall phone example: "HQU-12-TR1-011W"
Site location: HQU = WA Headquarters building, 12 = 12th floor, TR1 = Telecommunication Room, and 011W = wall phone cable drop #011 cable W.

9.3 Intra and Inter-Building Backbone Cables

These backbone cables interconnect wiring closets either within a building or interconnect buildings in a campus environment.

The naming convention applies for Intra-backbone cable labeling. Standard nomenclature for backbone cabling shall be as follows:

- MDF Location (3–6 alphanumeric characters).
- MDF Location (includes floor, closet and pair or strand designations).
- TR Location (3–6 alphanumeric characters).
- TR Location (includes floor, closet and pair or strand designations).

For example, "HQU-1/MDF-2/TR1-001"

From MDF location: HQU = Site code of the first location within building (origination point), 1 = 1st floor, MDF = Computer Room, 001 = cable pair (copper) or strand (fiber) if applicable –

To TR location: HQU = Site code of the second location within building (designation point), 2 = 2nd floor, TR1 = Telecommunication Room, 001 = cable pair (copper) or strand (fiber) if applicable.

These backbone cables interconnect wiring closets either within a building or interconnect buildings in a campus environment.

The naming convention applies for Inter-backbone cable labeling. Standard nomenclature for backbone cabling shall be as follows:

- First Building Location (2–6 alphanumeric characters).
- First Building MDF / TR Location (includes floor, closet and pair or strand designations).
- Second Building Location (2–6 alphanumeric characters).
- Second Building MDF / TR Location (includes floor, closet and pair or strand designations).

For example, "HQU-1-MDF-001 – ULL-1-MDF-001"

From location: HQU = Site code of the first building (origination point), 1 = 1st floor, MDF = Computer Room, 001 = cable pair (copper) or strand (fiber).

To location: ULL = Site code of the second building (destination point), 1 = 1st floor, MDF = Computer Room, 001 = cable pair (copper) or strand (fiber).

*** The cable labels shall be affixed to both ends of the cable, approximately 2 to 6 inches from the termination point. Machine printed, wrap-around labels are required.**

Exhibit 21: TIA/EIA 606-A color coding reference chart

	Color Coding of Termination Fields
Orange	Demarcation Point
Green	Network Connections on Customer's Side
Violet	Common Equipment
White	1st Level Backbone
Slate	2nd Level Backbone
Blue	Horizontal Cabling (HC end only)
Brown	Inter-building (campus) Backbone
Yellow	Auxiliary Circuits
Red	Reserved for Fire Alarm Circuits

10.0 TEST AND DOCUMENTATION PROCEDURES

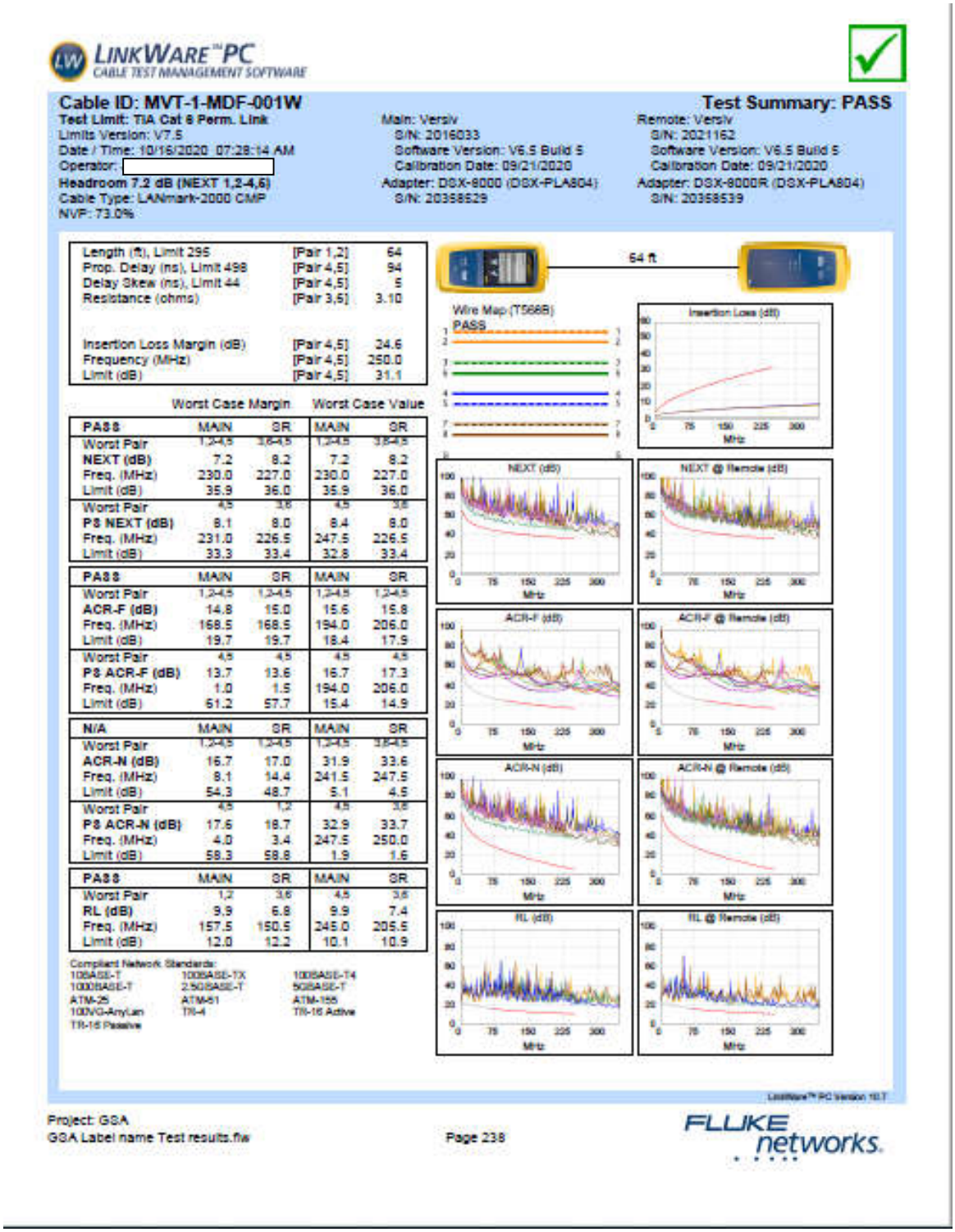
The installation contractor shall complete all testing of the cable plant. The installation contractor is responsible for providing all personnel, equipment, instrumentation, and supplies that are necessary to perform the required testing.

10.1 Testing of Installed Horizontal Copper Cable Plant

All installed copper cables shall be tested with a Fluke Level V or greater cable tester to certify that the cable conforms to ANSI/TIA/EIA-568C specifications. The test device shall provide printed and electronic (soft) Pass/Fail test results that show the following (Fluke Linkware flw. format):

- Length in feet (accurate to 0.5 feet)
- Wire map
- Insertion loss (attenuation)
- Propagation delay
- Delay skew
- NEXT loss
- PSNEXT loss
- ACRF / PSACRF loss
- ACRN / PSACRN loss
- Return loss (RL)
- Continuity (for all eight wires)
- Capacitance
- Resistance / DC loop
- Frequency
- Cable type
- Test limit
- Drop number
- Date of test / time
- Headroom
- Test summary: PASS
- Name, model and serial numbers of the field tester (i.e. Fluke).
- Adapter used for test.
- Software version or level.
- Date the field tester was last calibrated.
- Test performed (TIA Cat 6 Permanent link).

Exhibit 22: Example – Fluke Cat 6 Permanent Link Certification



LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-001W
Test Limit: TIA Cat 6 Perm. Link
Limits Version: V7.5
Date / Time: 10/16/2020 07:28:14 AM
Operator:
Headroom 7.2 dB (NEXT 1,2-4,5)
Cable Type: LANmark-2000 CMP
NVP: 73.0%

Main: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	64
Prop. Delay (ns), Limit 498	[Pair 4,5]	94
Delay Skew (ns), Limit 44	[Pair 4,5]	5
Resistance (ohms)	[Pair 3,6]	3.10
Insertion Loss Margin (dB)	[Pair 4,5]	24.6
Frequency (MHz)	[Pair 4,5]	250.0
Limit (dB)	[Pair 4,5]	31.1

64 ft

Wire Map (T568B)
PASS

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	3,6-4,5	1,2-4,5	3,6-4,5
NEXT (dB)	7.2	8.2	7.2	8.2
Freq. (MHz)	230.0	227.0	230.0	227.0
Limit (dB)	35.9	36.0	35.9	36.0
Worst Pair	4,5	3,6	4,5	3,6
PS NEXT (dB)	8.1	8.0	8.4	8.0
Freq. (MHz)	231.0	226.5	247.5	226.5
Limit (dB)	33.3	33.4	32.8	33.4

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	1,2-4,5
ACR-F (dB)	14.8	15.0	15.6	15.8
Freq. (MHz)	168.5	168.5	194.0	206.0
Limit (dB)	19.7	19.7	18.4	17.9
Worst Pair	4,5	4,5	4,5	4,5
PS ACR-F (dB)	13.7	13.6	16.7	17.3
Freq. (MHz)	1.0	1.5	194.0	206.0
Limit (dB)	61.2	57.7	15.4	14.9

N/A	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	3,6-4,5
ACR-N (dB)	16.7	17.0	31.9	33.6
Freq. (MHz)	8.1	14.4	241.5	247.5
Limit (dB)	54.3	48.7	5.1	4.5
Worst Pair	4,5	1,2	4,5	3,6
PS ACR-N (dB)	17.6	18.7	32.9	33.7
Freq. (MHz)	4.0	3.4	247.5	250.0
Limit (dB)	58.3	58.8	1.9	1.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	3,6	4,5	3,6
RL (dB)	9.9	6.8	9.9	7.4
Freq. (MHz)	157.5	150.5	245.0	205.5
Limit (dB)	12.0	12.2	10.1	10.9

Compliant Network Standards:
10BASE-T, 100BASE-TX, 1000BASE-T4, 1000BASE-T, 2.5GBASE-T, 5GBASE-T, ATM-25, ATM-51, ATM-155, 100VG-AnyLan, TR-4, TR-16 Active, TR-16 Passive

Insertion Loss (dB)
NEXT (dB)
NEXT @ Remote (dB)
ACR-F (dB)
ACR-F @ Remote (dB)
ACR-N (dB)
ACR-N @ Remote (dB)
RL (dB)
RL @ Remote (dB)
MHz

LinkWare™ PC Version 10.7

Project: GSA
GSA Label name Test results.flw

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FLUKE networks

10.2 Testing of Optical Fiber Cables

Testing shall be of the optical link as specified in TIA-568C and TIA-455 for multi-mode and single-mode fiber optics. An optical fiber link is defined as the passive cabling network between two optical cross-connects (patch panels or outlets). This includes cable, connectors and splices but does not include active components. The link test contains the representative connector loss at the patch panel associated with the mating of patch cords, but does not include the performance of the connector at the equipment interface.

If the manufacturer of cables or connecting hardware has supplied post-manufacture performance data, copies of such data are to be included in the documentation.

All installed fiber optic cables shall be tested with a Fluke Level V or greater cable tester to certify that the cable conforms to ANSI/TIA/EIA-568C and TIA-455 specifications. The test device shall provide printed and electronic (soft) Pass/Fail test results that show the following (Fluke Linkware flw format):

Exhibit 23: Typical Signal (Attenuation, Insertion Loss) for Fiber Optic Cables & Connectors

Optical Fiber Cable Type	Transmission wavelength (nm)	Estimated Maximum Attenuation (dB/km)
62.5 / 125 um MM	850 / 1300	3.5 / 1.5
50 / 125 um MM / LOMM	850 / 1300	3.0 / 1.5
Singlemode – Inside plant	1310 / 1550	1 / 1
Singlemode – Outside plant	1310 / 1550	.5 / .5

Test reports shall include the following information for each cabling element tested:

- Actual measured and maximum allowable attenuation (loss) at the specified wavelengths.
- Reference method.
- Number of mated connectors and number of splices (if any).
- Actual length and maximum allowable length.
- Group refractive index (GRI) for the type of fiber tested, if length was optically measured.
- Tester manufacturer, model, serial number and software version.
- Fiber Optic Cable ID number and project/job name.
- Link criteria used.
- Overall pass/fail indication.
- Cable type
- Test limit
- Identification number (pair, strand, etc.)

- Date of test / time
- Test summary: PASS
- Name, model and serial numbers of the field tester (i.e. Fluke).
- Adapter used for test.
- Software version or level.
- Date the field tester was last calibrated.
- Test performed (multimode 62.5um or 50um, singlemode, etc.).

*** Test reports are to be submitted in an electronic format along the Linkware .flw file on a CD or emailing option. Please consider the environment and do NOT print or provide hard copies of the test results.**

11.0 COMPUTER / TELECOMMUNICATION ROOM SPECIFICATIONS

11.1 Computer / Telecommunication Rooms (MDF and TR)

Typical telecommunications rooms house common equipment required to support both voice and data connectivity to workstations. Communication closets/rooms are typically centrally located on the floor, and adhere to the ANSI/TIA/EIA specifications for cable lengths (e.g. maximum cable from closet to workstation will not exceed 100 meters, end-to-end with an exception for extended distance of 350' utilizing Cat 6e if installed per manufacturer's requirements to meet the required warranty.). Closets/rooms should be vertically stacked, with a sufficient number of sleeves interconnecting each closet.

*** Refer to the Computer and Telephone Standard and Appendix (if applicable) documents for the following specifications and requirements.**

11.2 General Requirements

- Space should be environmentally temperate, convenient, and professional looking.

- Computer/ Telecommunication Rooms must have sufficient infrastructure required to support the variety of communication services provided to USCIS and contractor staff. Typically this includes items such as conduits, basket / cable trays, building grounding system, etc.

- Computer / Telecommunication Rooms should be designed for growth, and flexibility supporting new technologies without the need for major room modifications and rearrangements.

11.3 Conduit, Pathways & Sleeve Requirements

Conduit installations shall comply with all ANSI/TIA/EIA-569 specifications and NEC requirements. Highlights of that specification are as follows:

• Maximum fill factor of 40% per conduit shall be adhered to for new conduits. If possible, installers shall avoid using those conduits that have exceeded the 40% fill factor.

• Pull-box shall be installed every 100 feet and / or every two 90-degree turns.

• All bends in the conduit must be made hydraulically to create smooth, sweeping turns.

• All pull-boxes shall be sized to allow for the largest minimum bend radius for any of the cables that are used.

• Where local codes mandate that rigid conduit must be installed from the distribution closet to the EO / TO, a minimum of one 1-inch diameter conduit from wiring center to workstation EO / TO is required. This single, 1-inch conduit will support both voice and data grade cabling to the workstation and requires a consolidated voice and data closet.

• In buildings which local codes do not mandate rigid conduit from the distribution closet to the EO / TO, a minimum of one 1-inch diameter conduit from above ceiling grids to respective EO / TO is recommended. These conduits are referred to as "ring and string" within the industry, and typically provide a pathway for plenum cable installation into the outlet box. Although many local codes do not require rigid conduits for low voltage wiring, USCIS OIT recommends the general contractor install these for each EO / TO. The box, mounting ring and conduit stub with bushing to above ceiling space is typically provided by the electrician.

• Open office space (e.g., systems furniture where two or more EO / TO's are fed by a single column or feed) areas typically do not require conduit stubs or home run conduits. If conduits or stubs are installed, then conduit sizing shall ensure fill factor does not exceed 40%. Wall plates, bushings, loom tubing or spiral wrap for protection shall be utilized for the transition into the system furniture for a neat installation.

• Minimum of three (3) 4-inch diameter conduits shall be provided into any building or campus environment to utilize for entrance facility services, which is typical for new construction and coordinated by the lessor or GC with service providers to be extended to existing utility locations.

• Conduit sleeves shall be provided for horizontal penetrations for routing of cabling through sheetrock, block, etc. wall assemblies. Penetrations should be properly fire sealed in accordance with standards and code regulations.

• Minimum of three (3) 4-inch diameter sleeves shall be provided for vertically stacked closets. In open plenum environment where access to closets is not blocked by building structures or fixtures, and a clear pathway exists, conduit installation is not required to interconnect closets.

• Minimum of three (3) 4-inch diameter sleeves with plastic bushings shall be provided for the vertical transition of the horizontal cable plant from the above ceiling space down to the ladder runway in the MDF & TR's over the equipment racks for termination onto patch panels. Service loops shall be located in the basket tray or j-hooks above the MDF & TR's.

• Minimum of two (2) 4-inch diameter conduits shall be provided in any building or campus environment to the Building Demarcation Room location and where cable is subject to damage or there is no clear pathway for installation. These may be areas such as underground parking garages, outside cable routes, pathways through office space not under USCIS control, or areas that prevent cable installation at future dates, such as main building lobbies, under-floor pathways, etc.

• Minimum of four (4) 4-inch diameter conduits between buildings in a campus environment.

• Pull strings ("Mule Tape" or ¼" Nylon rope) shall be installed in all conduits intended for IT requirements.

• Pull one additional "Mule Tape" or ¼" Nylon rope when pulling cables through any conduit to replace the one previously installed for future requirements.

• Conduit pathways are required through office space not under USCIS control for floor box or drop locations and in public shared hallways for security and protection of the IT cabling. The requirement also applies in wall spaces shared with public or perimeter walls for protection.

*** Exceptions will be reviewed by the USCIS OIT representative.**

12.0 DOCUMENTATION

Upon completion of the cable plant installation, a documentation package will be completed within 30 calendar days that shall include the following items:

• Letter of certification of the installing organization from the structured cable plant vendor. **The Warranty for the installed structured cable plant shall be held by the manufacturer of the conductivity hardware (not the cable manufacturer)**.

• Completed Contractor Information Form.

• Detailed materials list.

• Cable plant test certification letter.

• Electronic Copper cable test results (soft) in Fluke Networks Linkware format (.flw). (Full plot data)

• Electronic Fiber Optic cable test results (soft) in Fluke Networks Linkware format (.flw). (Full plot data)

• Structured media warranty (system warranty) and warranty claim information document.

• As-built site drawings.

*** Please note that a rough draft floor plan with cable # identification must be left on site in the MDF / Computer Room for the OIT engineers to utilize for the deployments of new facilities. Surveying the cable plant is in the contact as a task of the voice vendor.**

All of this information shall be provided in both hardcopy and electronic formats, except as follows:

• Electronic Fiber Optic test results (soft).

• Electronic Copper test results (soft).

12.1 Letter of Certification & Information Form

A letter of certification shall be supplied to the designated USCIS Program Manager from the authorized project supervisor. A sample of the recommended letter of certification is included below in Attachment A & B of this document. The letter of certification should be submitted in electronic format using word Processing software compatible with Microsoft Word.

12.2 Implementation Report

A brief implementation report shall be submitted as part of the completed documentation package. This implementation report, at a minimum, should include the following information:

- Installing company name and address.
- Contract number and Task or Delivery Order, if any.
- Beginning and ending dates of the installation project.
- Names of personnel assigned to the installation project.
- Installation summary, including deviations from the original task order.
- Responsible party names, address, and phone number.

The electronic version of this report shall be submitted using word Processing software compatible with Microsoft Word. A sample implementation report is provided as Attachment C of this document.

12.3 Detailed Materials List

A detailed materials list shall be included as part of the completed documentation package. At a minimum, this list shall include all materials originally called for from the site survey report, actual materials used for the installation project, and a column that shows the deviation between the two. Any unusual deviations in required quantities should be explained in the implementation report, as described previously.

The detailed materials list should be completed and submitted using spreadsheet software compatible with Microsoft Excel. A sample form to be used for this list is provided as Attachment D of this document.

12.4 Cable Plant Test Certification Letter

In lieu of the responsible installation supervisor providing a signature on each printed cable test result, a letter of certification from the installation supervisor may be included to verify that installation personnel doing the testing have been properly trained in the use of the test equipment and that the test results included have been reviewed and are an accurate reflection of the installed cable plant.

The certification letter should be submitted in electronic format as a word Processing document compatible with Microsoft Word. A sample cable plant test certification letter is included as Attachment E of this document.

12.5 Copper Cable Test Results

Permanent Link, Category 6 test results for all cables shall be included in electronic format (Fluke Linkware format) within the completed documentation package upon completion of the project. The cable test results shall be provided in numeric order on a per closet basis for horizontal cables. All copper tie and backbone cable test results for continuity shall be included as a sub-section and also numbered. A sample cable plant test certification letter is included as Attachment F of this document.

12.6 Fiber Optic Backbone Cable Test Results

Test results for all cables shall be included in electronic format (Fluke Linkware format) within the completed documentation package upon completion of the project. Opposite ends of each fiber strand tested should be included side by side or in direct sequential order. The fiber optic test results shall be submitted in a closet-by-closet format. A sample cable plant test certification letter is included as Attachment G of this document.

12.7 As-built Drawings

Complete as-built site drawings of the cable plant shall be included as part of the completed documentation package in AutoCAD. At a minimum, the following information shall be included on the drawing:

- Accurate, reasonable facsimile of the building floor plan
- Room and area numbers assigned for identification purposes
- Location and designation of all wiring closets
- Location and designation of all information outlets installed
- Routes for all cables, including horizontal, tie, and backbone
- Location of all vertical penetrations
- Location of horizontal penetrations through fire walls
- Any special service application notes
- Backbone and tie cable lengths between closets

These as-built site drawings shall be completed using computer-aided drawing software that produces vector graphics data files, submitted preferably in the AutoCAD version 2010.

Attachment A – Sample Letter of Certification

TO THE PROGRAM INSTALLATION PARTNER

CERTIFICATION AGGREEMENT

[*Solution Vendor*] Certification Program
Structured Cabling Installation Partner Certification

"*Installation Company*"

"*Installation Company*" has met the Certification Partner selection criteria and has successfully completed the program training. Therefore "*Installation Company*" is hereby certified as a Certification Program Installation Partner, and as such is authorized by *[Vendor*] to design and install [Solutions Vendor] Certified Systems, and to support the Certification Program 20-year Applications Assurance and an extended limited component warranty.

"*Installation Company*" has agreed top conform to all [*vendor*] specified and TIA/EIA compliant installation practices as presented in the Program training program.

[*Vendor*] approved systems designed for the TIA/EIA-570 Category 6 channel performance and registered with [*vendor*] by a certified Certification Program Installation Partner are covered by the Certification Program Applications Assurance and an extended limited component warranty.

Certification Number: _____ Certification Date: _____

Attachment B – Sample Contractor Information Form

CONTRACTOR INFORMATION
JOB NAME:
LOCATION:
DATE:
PROJECT: Cable Plant Installation

FIBER CONTRACTOR
NAME:
PHONE:
ADDRESS:
CITY, STATE, ZIP:
CONTACT NAME:
COMPLETION DATE:
SCOPE OF WARRANTY RESPONSIBILITY: In accordance with Existing Contract

SUPPLIED MATERIALS: In accordance with Task Order XXX-xxx

COPPER CONTRACTOR
NAME:
PHONE:
ADDRESS:
CITY, STATE, ZIP:
CONTACT NAME:
COMPLETION DATE:
SCOPE OF WARRANTY RESPONSIBILITY: In accordance with Existing Contract

SUPPLIED MATERIALS: In accordance with Task Order XXX-xxx

Attachment C – Sample Implementation Report

PROJECT IMPLEMENTATION REPORT – SITE "MVT "

INTRODUCTION

"Company A" under sub-contract to "Company B", and working under Task Order Number XXX-xxx, recently performed a local cable plant installation at "Site LKT". The project was begun on Monday July 7, 2020, and the installation was completed on Wednesday, December 23, 2020.

PROJECT PERSONNEL

The following "Company A" personnel participated in the installation project at "Site MVT":
Mr. X Program Manager, Mr. Y Task Team Leader, Mr. Z Senior Network Engineer.

INSTALLATION SUMMARY

The network installation was completed in accordance with the Task Order, using the Site Survey Report as the guide for project completion. In accordance with the design documentation the facility was cabled for a total of 82 Duplex wall / system furniture, 20 Duplex wireless / OH Paging System, 4 wall phone and 4 CATV cable drop locations. All drops were installed through a self-suspended overhead cable routing system, basket tray and j-hook assemblies, above the acoustic ceiling tiles in the office areas of the Site "MVT".

The three designated Computer Room MVT-1-MDF serves the workstation connectivity needs for the facility. The building cables are identified by labels starting with MVT-1-MDF. All 132 cable drops for the MDF terminate on the patch panels in the equipment racks located in Room # 118, which also serves as the main LAN / Computer Room.

One twelve-strand armored, plenum OM3 LOMM multi-mode fiber-optic cable connects the Building Demarcation to the MDF / Computer Room along with a 50-pair voice copper and RG11/U cables. A second twelve-strand armored, plenum OM3 LOMM multi-mode fiber-optic cable connects the HSDN / Talon Room to the MDF / Computer Room for the One-Net connection along with a 2D – Duplex drop location routes with 18" separation from the remaining cable plant.

There were no modifications made to the design documentation from the Site Survey Report. All material was provided and installed in accordance with the materials listing in the report.

PROJECT DOCUMENTATION

Included within the As-built documentation package, both in hard copy and electronic format, is the following information:

Item	Electronic Format
Letter of Certification	Word processing compatible with Microsoft Word for Windows
Implementation Report	Word processing compatible with Microsoft Word for Windows
Contractor Information	Word processing compatible with Microsoft Word for Windows
Cable Plant Database	Spreadsheet compatible with Microsoft Excel
Detailed Materials Listing	Spreadsheet compatible with Microsoft Excel
Cable Plant Test Results	Fluke Linkware .flw File
Active Equipment Installation Log	Spreadsheet compatible with Microsoft Excel
As-built Site Drawings	AutoCAD format compatible with AutoCAD Version 2010
Wiring Closet Detail	Visio or AutoCAD Version 2010

CONCLUSION

The installation project was completed on December 23, 2020.

All materials and workmanship provided by Company A are fully warranted under the terms of the existing contract between Company B and Company A.

Any questions concerning the project installation, documentation, and warranty may be addressed to Mr. Y of "Company A" or at (000) 555-0000.

Attachment D – Sample Detailed Materials List

Item No.	Description	Projected Quantity	Actual Quantity
1	Horizontal Hinged Double-Sided Wire Managers 1U	2	2
2	Horizontal Hinged Double-Sided Wire Managers 2U	6	6
3	VertiGo 12-port patch panel (Servers & PBX)	5	5
4	Cat 6 - 48 Port Patch Panel - 2U	5	5
5	Cat 6 - 24 Port Patch Panel - 1U	7	7
6	Cat 5e - 24 Port Patch Panel - 1U	2	2
7	Rack Mount Power Outlet Strip – APC -AP7582 PDU	1	1
8	Single Gang Faceplate, 2-port (white)	82	82
9	Single Gang Stainless Steel wall phone plate w/ studs	4	4
10	Horizontal Hinged Double-Sided Wire Managers 1U	1	1
11	Cat 6 - RJ-45 Jack, 568B modular outlet – keystone (blue)	102	102
12	Cat 6 - RJ-45 Jack, 568B modular outlet – keystone (red)	102	102
13	Cat 6 - RJ-45 Jack, 568B modular outlet – keystone (white)	4	4
14	Cat 6 - RJ-45 Jack, 568B modular outlet – keystone (violet)	60	60
15	Cat 6e Cable, 23-24AWG 4Pair, white plenum (feet)	45000	45343
16	Velcro ¾" x 75'	4	4
17	2-port surface box (white) & ceiling bracket	20	20
18	50-Pair, CAT 3 Cable (feet)	250	242
19	110FT Block w/ 5 pair clips	3	3
20	25 Pair, CAT 3 Riser Voice Backbone Cable (feet)	30	25
21	J-hook assemblies	240	255
22	10" Black Hinged Double-Sided Vertical Managers	4	4
22	19" Equipment Rack mounting kit	3	3
23	19" Equipment Rack, black stand-alone	3	3
25	Rack Mount 2U Power Distribution Unit – APC -AP7582 PDU	4	4
26	19" Black Vented Single-Sided Rack Shelves	2	2
27	24" x 10' Ladder runway (black)	6	6
28	24" elevation kit & mounting plate - ladder runway (black)	3	3
29	24" Ladder runway - center supporting bracket (black)	3	3
30	Ladder runway wall angle bracket	5	5
31	Ladder runway 6" radius drop	6	6
32	Ladder runway junction & butt splices	4	4
33	Ladder runway grounding straps, 2-hole lugs, etc.	6	6
34	AWG # 6 ground wire	100	90
35	Cat 6 Patch Cable, blue, 1' (foot)	120	120
36	Cat 6 Patch Cable, blue, 3' (feet)	20	20

37	Cat 6 Patch Cable, red, 1' (foot)	20	20
38	Cat 6 Patch Cable, red, 3' (feet)	40	40
39	Cat 6 Patch Cable, red, 5' (feet)	20	20
40	Cat 6 Patch Cable, violet, 1'(foot)	40	40
41	Cat 6 Patch Cable, violet, 5' (feet)	20	20
42	Cat 6 Patch Cable, violet, 10' (feet)	20	20
43	Cat 6 Patch Cable, violet, 15' (feet)	20	20
44	Cat 6 Patch Cable, white, 5' (feet)	10	10
45	Cat 6 Patch Cable, gray, 10' (feet) – plenum for ceiling	10	10
46	Cat 6 Patch Cable, gray, 20' (feet) – plenum for ceiling	20	20
47	Cat 6 Patch Cable, green, 1' (foot)	20	20
48	Cat 6 Patch Cable, green, 3' (feet)	10	10
49	Cat 6 Patch Cable, black, 1' (feet)	10	10
50	Cat 6 Patch Cable, black, 10' (feet)	20	20
51	Cat 6 Patch Cable, black, 20' (feet)	110	110
52	3-step stool	1	1
53	Tool kit	1	1
54	Butt set	1	1
55	CATV RG6U Quad-shield cable, white plenum (feet)	1000	875
56	F-series modular outlet – keystone (CATV)	4	4
57	RG6U Quad-shield cable connectors (CATV)	8	8
58	Single Gang Faceplate, 1-port (white)	4	4
59	RG/11U Quad-shield Cable (feet)	250	242
60	RG/11U Quad-shield connectors (CATV)	2	2
61	12-Strand armored fiber optic 50um LOMM Cable (feet)	300	285
62	LC Duplex 50um LOMM fiber 12-fiber panels	4	4
63	LC 50um LOMM connectors	48	48
64	Wall-mount fiber enclosure	2	2
65	1U fiber enclosure	2	2
66	LC-LC Duplex 50um LOMM fiber jumper 3M	4	4
67	LC-LC Duplex 50um LOMM fiber jumper 5M	4	4
68	Misc. – grounding components, labels, tape, pull string, etc.	1	1

Attachment E – Sample Cable Test Certification Letter

[*Use Corporate letterhead*]

Date: [Current date]

To: [Full name of individual to whom the letter is being sent]

Address: [*of individual to whom letter is addressed*]

Re: USCIS Cable Plant Installation at "Site C"

Task Order No.: [*XXX-xxx*]

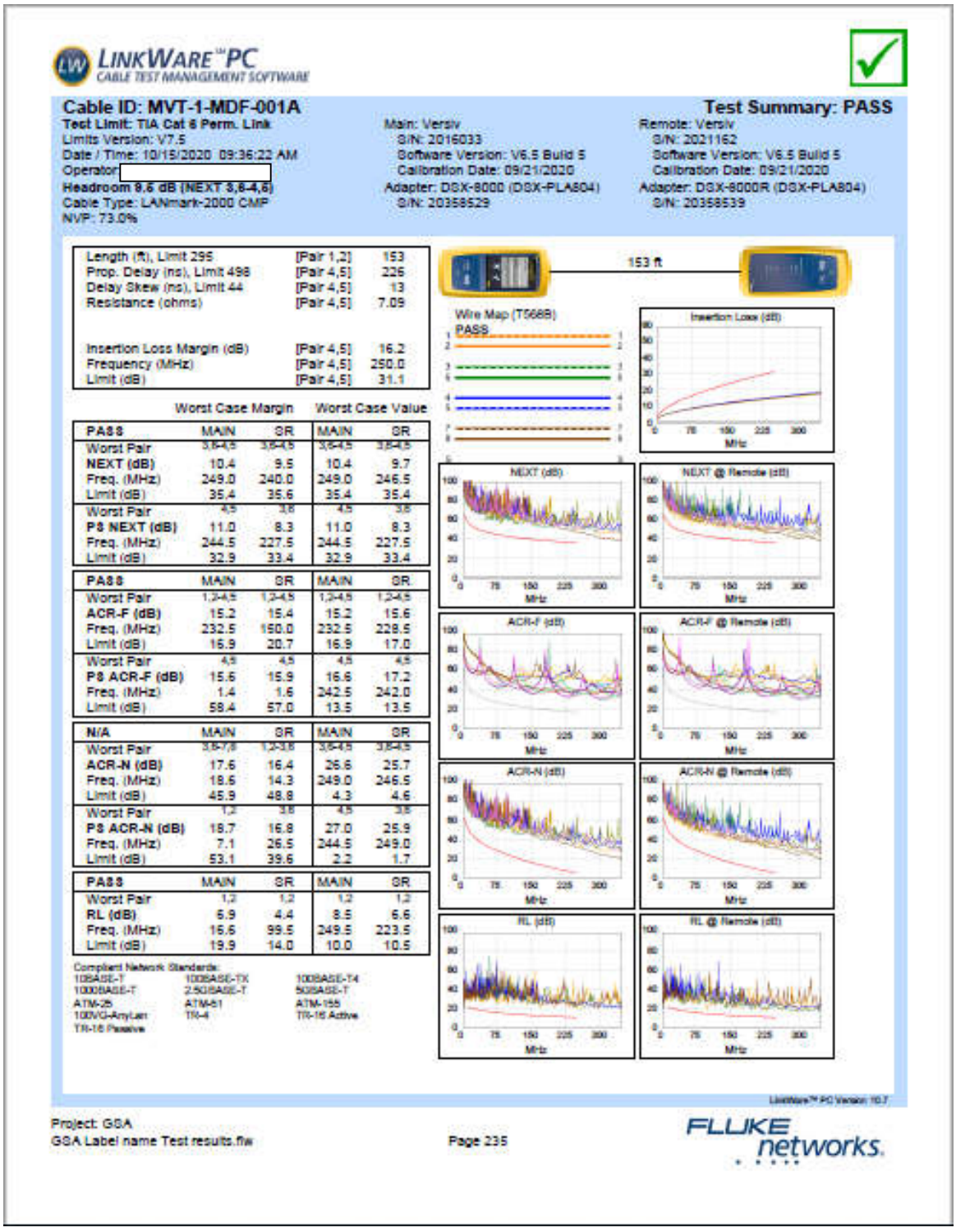
Dear [*Mr., Ms., or Dr. and last name*]:

This letter is to certify that all cable test results included for the above mentioned project has been completed by "Company A" personnel who have been trained, and are competent in the use of, the required cable testing equipment.

Please accept this letter as certification of the accuracy of the test results furnished in lieu of individual signatures on each cable test result.

[Mr., Ms., or Dr. and name] [Title]

Attachment F- Sample Cat 6 Cable Permanent Link Certification



LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-001A
Test Limit: TIA Cat 6 Perm. Link
Limits Version: V7.5
Date / Time: 10/15/2020 09:36:22 AM
Operator:
Headroom 9.6 dB (NEXT 3,6-4,5)
Cable Type: LANmark-2000 CMP
NVP: 73.0%

Main: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA604)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA604)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	153
Prop. Delay (ns), Limit 498	[Pair 4,5]	226
Delay Skew (ns), Limit 44	[Pair 4,5]	13
Resistance (ohms)	[Pair 4,5]	7.09
Insertion Loss Margin (dB)	[Pair 4,5]	16.2
Frequency (MHz)	[Pair 4,5]	250.0
Limit (dB)	[Pair 4,5]	31.1

153 ft

Wire Map (T568B)
PASS

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
NEXT (dB)	10.4	9.5	10.4	9.7
Freq. (MHz)	249.0	240.0	249.0	246.5
Limit (dB)	35.4	35.6	35.4	35.4
Worst Pair	4,5	3,6	4,5	3,6
PS NEXT (dB)	11.0	8.3	11.0	8.3
Freq. (MHz)	244.5	227.5	244.5	227.5
Limit (dB)	32.9	33.4	32.9	33.4

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	1,2-4,5
ACR-F (dB)	15.2	15.4	15.2	15.6
Freq. (MHz)	232.5	150.0	232.5	228.5
Limit (dB)	16.9	20.7	16.9	17.0
Worst Pair	4,5	4,5	4,5	4,5
PS ACR-F (dB)	15.6	15.9	16.6	17.2
Freq. (MHz)	1.4	1.6	242.5	242.0
Limit (dB)	58.4	57.0	13.5	13.5

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	1,2-3,6	3,6-4,5	3,6-4,5
ACR-N (dB)	17.6	16.4	26.6	25.7
Freq. (MHz)	18.6	14.3	249.0	246.5
Limit (dB)	45.9	48.8	4.3	4.6
Worst Pair	1,2	3,6	4,5	3,6
PS ACR-N (dB)	18.7	16.8	27.0	25.9
Freq. (MHz)	7.1	26.5	244.5	249.0
Limit (dB)	53.1	39.6	2.2	1.7

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	1,2	1,2	1,2
RL (dB)	6.9	4.4	8.5	6.6
Freq. (MHz)	16.6	99.5	249.5	223.5
Limit (dB)	19.9	14.0	10.0	10.5

Compliant Network Standards:
10BASE-T, 100BASE-TX, 100BASE-T4, 1000BASE-T, 2.5GBASE-T, 5GBASE-T, ATM-25, ATM-51, ATM-155, 100VG-AnyLan, TR-4, TR-16 Active, TR-16 Passive

Insertion Loss (dB)
NEXT (dB)
NEXT @ Remote (dB)
ACR-F (dB)
ACR-F @ Remote (dB)
ACR-N (dB)
ACR-N @ Remote (dB)
RL (dB)
RL @ Remote (dB)
MHz

LinkWare™ PC Version 10.7

Project: GSA
GSA Label name Test results.flw

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FLUKE networks

LINKWARE™PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-001B
Test Limit: TIA Cat 8 Perm. Link
Limits Version: V7.5
Date / Time: 10/15/2020 12:35:54 PM
Operator:
Headroom 8.0 dB (NEXT 1,2-4,6)
Cable Type: LANmark-2000 CMP
NVP: 73.0%

Main: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	155
Prop. Delay (ns), Limit 498	[Pair 4,5]	230
Delay Skew (ns), Limit 44	[Pair 4,5]	14
Resistance (ohms)	[Pair 4,5]	7.18
Insertion Loss Margin (dB)	[Pair 3,6]	16.1
Frequency (MHz)	[Pair 3,6]	250.0
Limit (dB)	[Pair 3,6]	31.1

155 ft

Wire Map (T568B)
PASS

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	1,2-4,5
NEXT (dB)	9.1	9.0	10.6	9.5
Freq. (MHz)	106.0	159.0	237.0	223.0
Limit (dB)	41.4	38.6	35.7	36.2
Worst Pair	1,2	4,5	1,2	4,5
PS NEXT (dB)	10.3	10.3	10.3	10.3
Freq. (MHz)	212.0	250.0	212.0	250.0
Limit (dB)	33.9	32.7	33.9	32.7

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	4,5-1,2	1,2-4,5	4,5-1,2
ACR-F (dB)	13.8	14.4	13.8	14.6
Freq. (MHz)	223.5	222.0	223.5	225.0
Limit (dB)	17.2	17.3	17.2	17.1
Worst Pair	4,5	4,5	4,5	4,5
PS ACR-F (dB)	15.8	15.8	15.9	17.1
Freq. (MHz)	1.5	1.0	231.0	229.0
Limit (dB)	57.7	61.2	13.9	14.0

N/A	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	1,2-4,5
ACR-N (dB)	14.0	16.1	26.1	26.9
Freq. (MHz)	12.3	12.3	237.0	250.0
Limit (dB)	50.3	50.3	5.6	4.2
Worst Pair	1,2	1,2	4,5	4,5
PS ACR-N (dB)	16.0	17.1	28.1	26.4
Freq. (MHz)	12.3	7.8	250.0	250.0
Limit (dB)	47.9	52.4	1.6	1.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	1,2	1,2	1,2
RL (dB)	5.6	4.5	9.7	4.5
Freq. (MHz)	30.5	159.5	233.0	159.5
Limit (dB)	18.6	12.0	10.3	12.0

Compliant Network Standards:
10BASE-T, 100BASE-TX, 1000BASE-T4, 10GBASE-T, 2.5GBASE-T, 5GBASE-T, ATM-25, ATM-51, ATM-155, 100VG-AnyLan, TR-4, TR-16 Active, TR-16 Passive

Insertion Loss (dB)
NEXT (dB)
NEXT @ Remote (dB)
ACR-F (dB)
ACR-F @ Remote (dB)
ACR-N (dB)
ACR-N @ Remote (dB)
RL (dB)
RL @ Remote (dB)
MHz

LinkWare™ PC Version 10.7

Project: GSA
GSA Label name Test results.flw

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FLUKE networks

LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-001S
Test Limit: TIA Cat 6 Perm. Link
Limits Version: V7.5
Date / Time: 10/13/2020 10:20:46 AM
Operator:
Headroom 3.4 dB (NEXT 1,2-3,6)
Cable Type: LANmark-2000 CMP
NVP: 73.0%

Main: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	21
Prop. Delay (ns), Limit 498	[Pair 4,5]	30
Delay Skew (ns), Limit 44	[Pair 3,6]	1
Resistance (ohms)	[Pair 3,6]	1.12
Insertion Loss Margin (dB)	[Pair 7,8]	28.8
Frequency (MHz)	[Pair 7,8]	250.0
Limit (dB)	[Pair 7,8]	31.1

21 ft

Wire Map (T568B)
PASS

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	1,2-3,6	3,6-4,5	1,2-3,6
NEXT (dB)	5.6	3.4	5.6	3.6
Freq. (MHz)	238.0	207.5	238.0	246.5
Limit (dB)	35.7	36.7	35.7	35.4
Worst Pair	4,5	3,6	4,5	3,6
PS NEXT (dB)	5.9	4.6	5.9	4.6
Freq. (MHz)	238.0	250.0	238.0	250.0
Limit (dB)	33.1	32.7	33.1	32.7
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	3,6-4,5	4,5-3,6
ACR-F (dB)	15.7	15.7	22.3	22.3
Freq. (MHz)	12.5	7.0	250.0	250.0
Limit (dB)	42.3	47.3	16.2	16.2
Worst Pair	4,5	4,5	4,5	4,5
PS ACR-F (dB)	16.3	16.2	20.6	19.7
Freq. (MHz)	1.1	1.5	210.5	174.5
Limit (dB)	60.2	57.7	14.7	16.4
N/A	MAIN	SR	MAIN	SR
Worst Pair	4,5-7,8	1,2-3,6	3,6-4,5	1,2-3,6
ACR-N (dB)	16.1	15.7	33.7	32.2
Freq. (MHz)	5.3	8.4	238.0	246.5
Limit (dB)	58.2	54.0	5.5	4.6
Worst Pair	4,5	3,6	4,5	3,6
PS ACR-N (dB)	15.4	14.6	34.1	33.5
Freq. (MHz)	5.1	8.6	238.0	250.0
Limit (dB)	56.1	51.4	2.8	1.6
N/A	MAIN	SR	MAIN	SR
Worst Pair	7,8	7,8	7,8	7,8
RL (dB)	6.1	6.0	6.1	6.0
Freq. (MHz)	250.0	250.0	250.0	250.0
Limit (dB)	10.0	10.0	10.0	10.0

Insertion Loss (dB)
NEXT (dB)
NEXT @ Remote (dB)
ACR-F (dB)
ACR-F @ Remote (dB)
ACR-N (dB)
ACR-N @ Remote (dB)
RL (dB)
RL @ Remote (dB)
MHz

Compliant Network Standards:
10BASE-T
1000BASE-T
ATM-25
100VG-AnyLan
TR-16 Passive
1000BASE-TX
2.5GBASE-T
ATM-51
TR-4
1000BASE-T4
5GBASE-T
ATM-155
TR-16 Active

LinkWare™ PC Version 10.7

Project: GSA
GSA Label name Test results.flw

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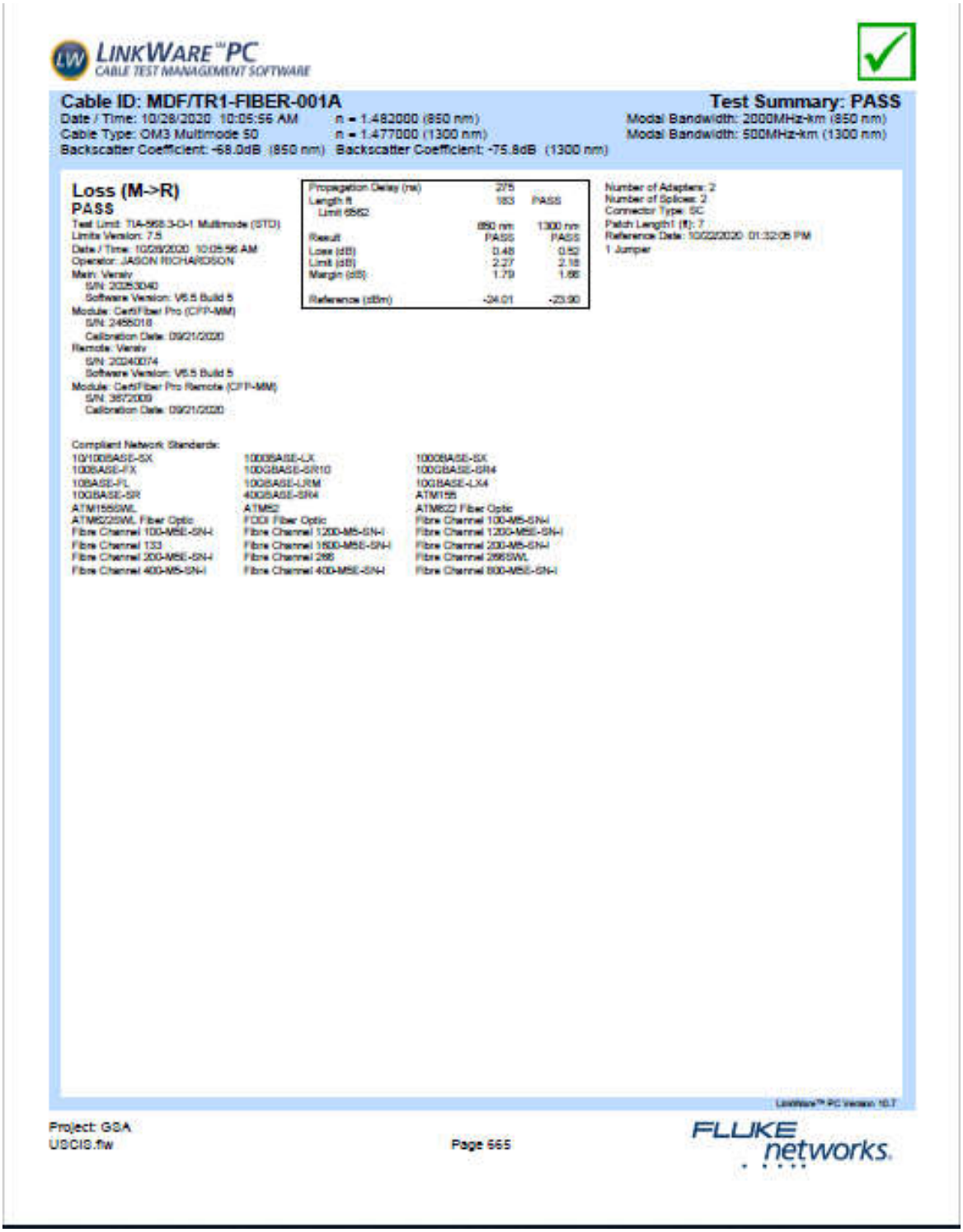
FLUKE networks

Attachment G – Sample Fiber Optic Cable Certification



LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MDF/TR1-FIBER-001A
Date / Time: 10/28/2020 10:05:56 AM
Cable Type: OM3 Multimode 50
Backscatter Coefficient: -68.0dB (850 nm)
n = 1.482000 (850 nm)
n = 1.477000 (1300 nm)
Backscatter Coefficient: -75.8dB (1300 nm)

Test Summary: PASS
Modal Bandwidth: 2000MHz-km (850 nm)
Modal Bandwidth: 500MHz-km (1300 nm)

Loss (M->R)
PASS
Test Limit: TIA-568.3-D-1 Multimode (STD)
Limits Version: 7.5
Date / Time: 10/28/2020 10:05:56 AM
Operator: JASON RICHARDSON
Main: Versiv
S/N: 20353040
Software Version: V6.5 Build 5
Module: CertiFiber Pro (CFP-MM)
S/N: 2455018
Calibration Date: 09/21/2020
Remote: Versiv
S/N: 20240074
Software Version: V6.5 Build 5
Module: CertiFiber Pro Remote (CFP-MM)
S/N: 3572009
Calibration Date: 09/21/2020

Propagation Delay (ns)	275	
Length ft Limit 6562	183	PASS
	850 nm	1300 nm
Result	PASS	PASS
Loss (dB)	0.48	0.50
Limit (dB)	2.27	2.18
Margin (dB)	1.79	1.68
Reference (dBm)	-24.01	-23.90

Number of Adapters: 2
Number of Splices: 2
Connector Type: SC
Patch Length1 (ft): 7
Reference Date: 10/22/2020 01:32:05 PM
1 Jumper

Compliant Network Standards:

10/100BASE-SX	1000BASE-LX	1000BASE-SX
100BASE-FX	10GBASE-SR10	10GBASE-SR4
10BASE-FL	10GBASE-LRM	10GBASE-LX4
10GBASE-SR	40GBASE-SR4	ATM155
ATM155SWL	ATM52	ATM622 Fiber Optic
ATM622SWL Fiber Optic	FDDI Fiber Optic	Fibre Channel 100-M5-SN-I
Fibre Channel 100-M5E-SN-I	Fibre Channel 1200-M5-SN-I	Fibre Channel 1200-M5E-SN-I
Fibre Channel 133	Fibre Channel 1600-M5E-SN-I	Fibre Channel 200-M5-SN-I
Fibre Channel 200-M5E-SN-I	Fibre Channel 266	Fibre Channel 2656WL
Fibre Channel 400-M5-SN-I	Fibre Channel 400-M5E-SN-I	Fibre Channel 800-M5E-SN-I

LinkWare™ PC version 10.7

Project: GSA
USCIS.fw

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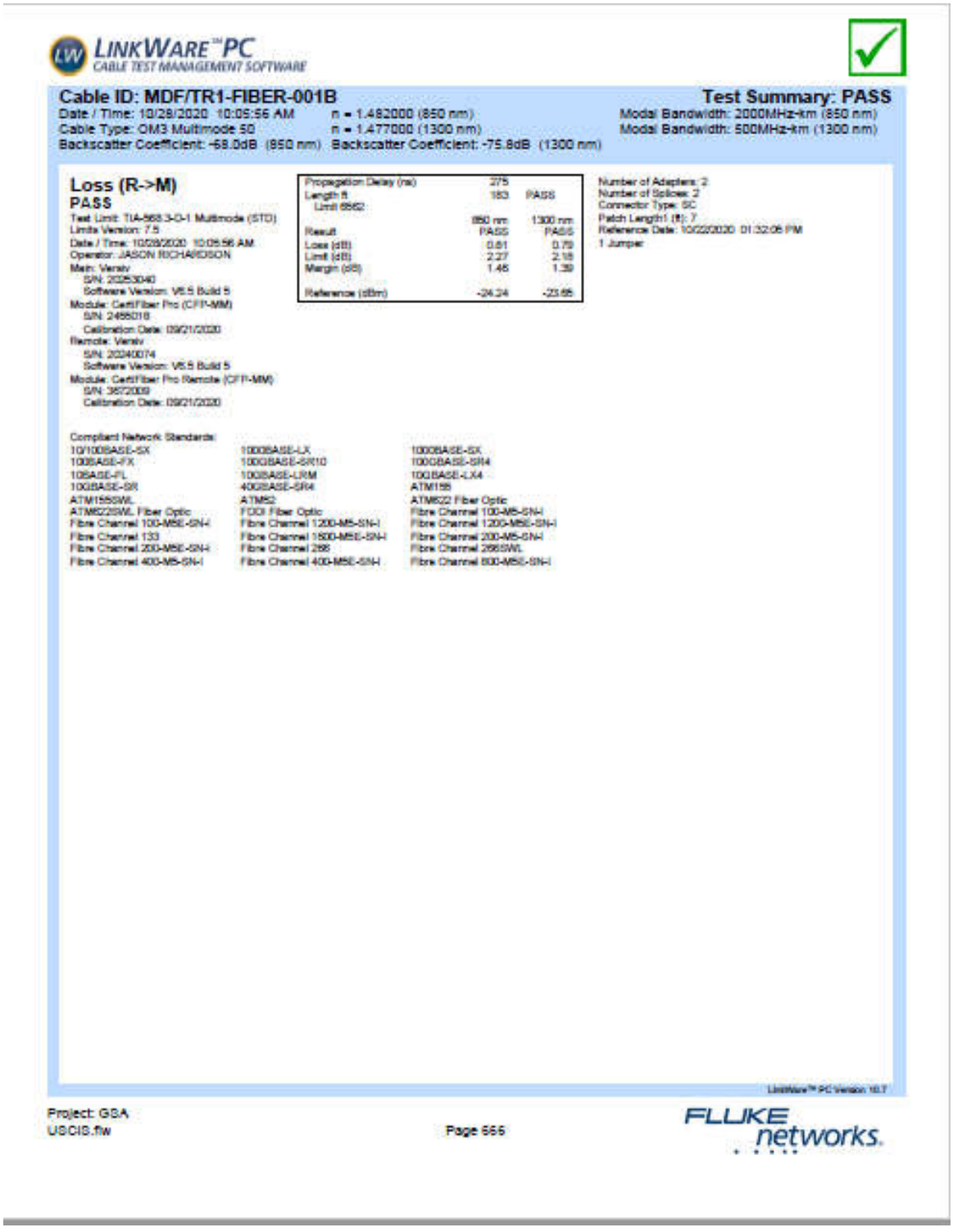

LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MDF/TR1-FIBER-001B
Date / Time: 10/28/2020 10:05:56 AM
Cable Type: OM3 Multimode 50
Backscatter Coefficient: -68.0dB (850 nm)
n = 1.482000 (850 nm)
n = 1.477000 (1300 nm)
Backscatter Coefficient: -75.8dB (1300 nm)

Test Summary: PASS
Modal Bandwidth: 2000MHz-km (850 nm)
Modal Bandwidth: 500MHz-km (1300 nm)

Loss (R->M)
PASS
Test Limit: TIA-568.3-D-1 Multimode (STD)
Limits Version: 7.5
Date / Time: 10/28/2020 10:05:56 AM
Operator: JASON RICHARDSON
Main: Versiv
S/N: 20353040
Software Version: V6.5 Build 5
Module: CertiFiber Pro (CFP-MM)
S/N: 2466018
Calibration Date: 09/21/2020
Remote: Versiv
S/N: 20340074
Software Version: V6.5 Build 5
Module: CertiFiber Pro Remote (CFP-MM)
S/N: 3672009
Calibration Date: 09/21/2020

Propagation Delay (ns)	375	
Length ft Limit 6562	183	PASS
	850 nm	1300 nm
Result	PASS	PASS
Loss (dB)	0.61	0.79
Limit (dB)	2.27	2.18
Margin (dB)	1.46	1.39
Reference (dBm)	-24.24	-23.66

Number of Adapters: 2
Number of Splices: 2
Connector Type: SC
Patch Length1 (ft): 7
Reference Date: 10/22/2020 01:32:06 PM
1 Jumper

Compliant Network Standards:

10/100BASE-SX	1000BASE-LX	1000BASE-SX
100BASE-FX	10GBASE-SR10	10GBASE-SR4
10BASE-FL	10GBASE-LRM	10GBASE-LX4
10GBASE-SR	40GBASE-SR4	ATM155
ATM155WL	ATM52	ATM622 Fiber Optic
ATM622WL Fiber Optic	FDDI Fiber Optic	Fibre Channel 100-M5-SN-I
Fibre Channel 100-M5E-SN-I	Fibre Channel 1200-M5-SN-I	Fibre Channel 1200-M5E-SN-I
Fibre Channel 133	Fibre Channel 1500-M5E-SN-I	Fibre Channel 200-M5-SN-I
Fibre Channel 200-M5E-SN-I	Fibre Channel 266	Fibre Channel 2665WL
Fibre Channel 400-M5-SN-I	Fibre Channel 400-M5E-SN-I	Fibre Channel 800-M5E-SN-I

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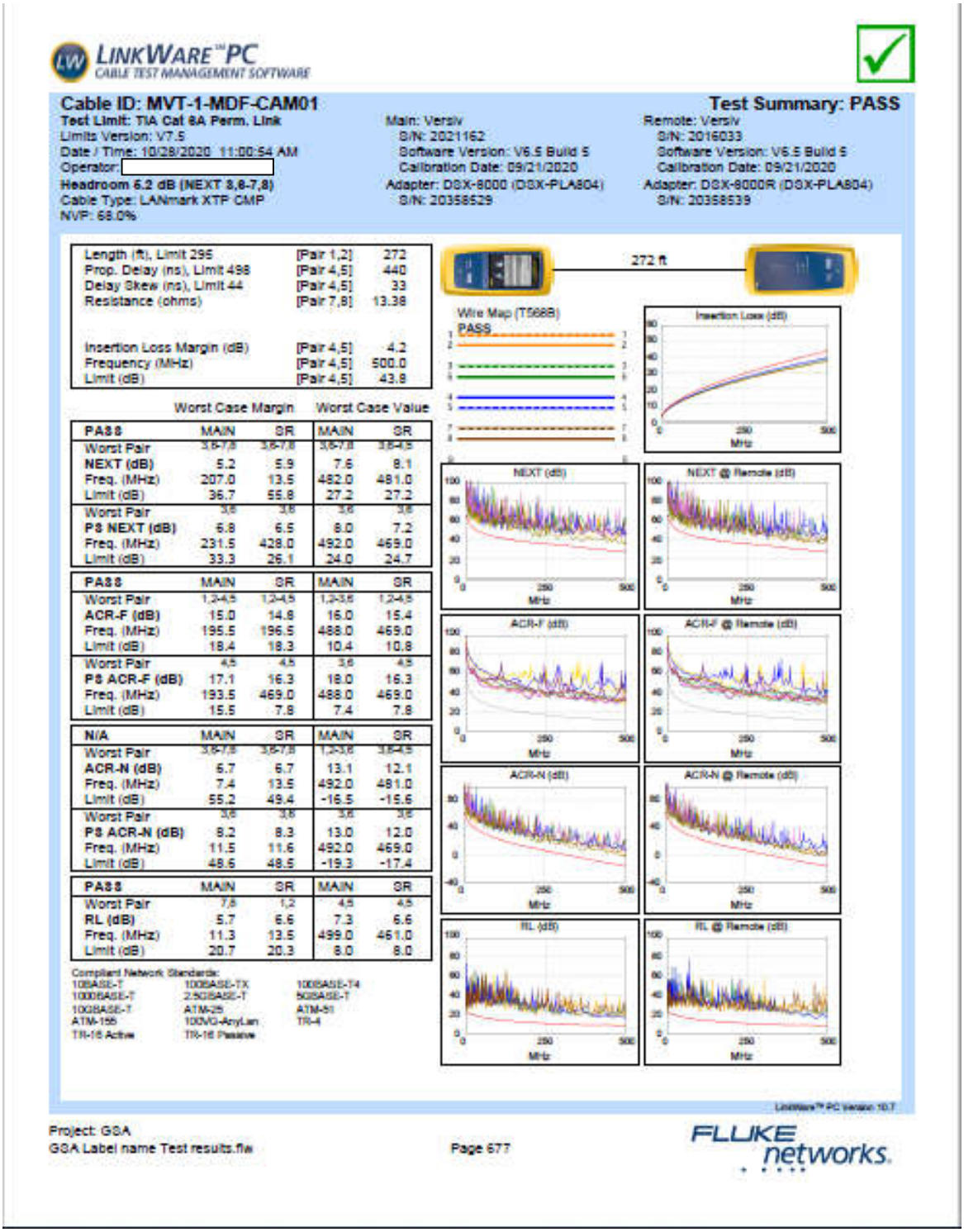
Attachment H – Sample Security Cat 6A Cable Permanent Link Certification



LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-CAM01
Test Limit: TIA Cat 6A Perm. Link
Limits Version: V7.5
Date / Time: 10/28/2020 11:00:54 AM
Operator:
Headroom 6.2 dB (NEXT 3,6-7,8)
Cable Type: LANmark XTP CMP
NVP: 68.0%

Main: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	272
Prop. Delay (ns), Limit 498	[Pair 4,5]	440
Delay Skew (ns), Limit 44	[Pair 4,5]	33
Resistance (ohms)	[Pair 7,8]	13.38
Insertion Loss Margin (dB)	[Pair 4,5]	4.2
Frequency (MHz)	[Pair 4,5]	500.0
Limit (dB)	[Pair 4,5]	43.8

272 ft

Wire Map (T568B)
PASS

Insertion Loss (dB)

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-7,8	3,6-7,8	3,6-4,5
NEXT (dB)	5.2	5.9	7.6	8.1
Freq. (MHz)	207.0	13.5	482.0	481.0
Limit (dB)	36.7	55.8	27.2	27.2
Worst Pair	3,6	3,6	3,6	3,6
PS NEXT (dB)	6.8	6.5	8.0	7.2
Freq. (MHz)	231.5	428.0	492.0	469.0
Limit (dB)	33.3	26.1	24.0	24.7

NEXT (dB) | NEXT @ Remote (dB)

PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-3,6	1,2-4,5
ACR-F (dB)	15.0	14.8	16.0	15.4
Freq. (MHz)	195.5	196.5	488.0	469.0
Limit (dB)	18.4	18.3	10.4	10.8
Worst Pair	4,5	4,5	3,6	4,5
PS ACR-F (dB)	17.1	16.3	18.0	16.3
Freq. (MHz)	193.5	469.0	488.0	469.0
Limit (dB)	15.5	7.8	7.4	7.8

ACR-F (dB) | ACR-F @ Remote (dB)

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-7,8	1,2-3,6	3,6-4,5
ACR-N (dB)	6.7	6.7	13.1	12.1
Freq. (MHz)	7.4	13.5	492.0	481.0
Limit (dB)	55.2	49.4	-16.5	-15.6
Worst Pair	3,6	3,6	3,6	3,6
PS ACR-N (dB)	8.2	8.3	13.0	12.0
Freq. (MHz)	11.5	11.6	492.0	469.0
Limit (dB)	48.6	48.5	-19.3	-17.4

ACR-N (dB) | ACR-N @ Remote (dB)

PASS	MAIN	SR	MAIN	SR
Worst Pair	7,8	1,2	4,5	4,5
RL (dB)	5.7	6.6	7.3	6.6
Freq. (MHz)	11.3	13.5	499.0	461.0
Limit (dB)	20.7	20.3	8.0	8.0

RL (dB) | RL @ Remote (dB)

Compliant Network Standards:
10BASE-T | 1000BASE-TX | 1000BASE-T4
1000BASE-T | 2.5GBASE-T | 5GBASE-T
100BASE-T | ATM-25 | ATM-51
ATM-155 | 100VG-AnyLan | TR-4
TR-16 Active | TR-16 Passive

Project: GSA
GSA Label name Test results.flw

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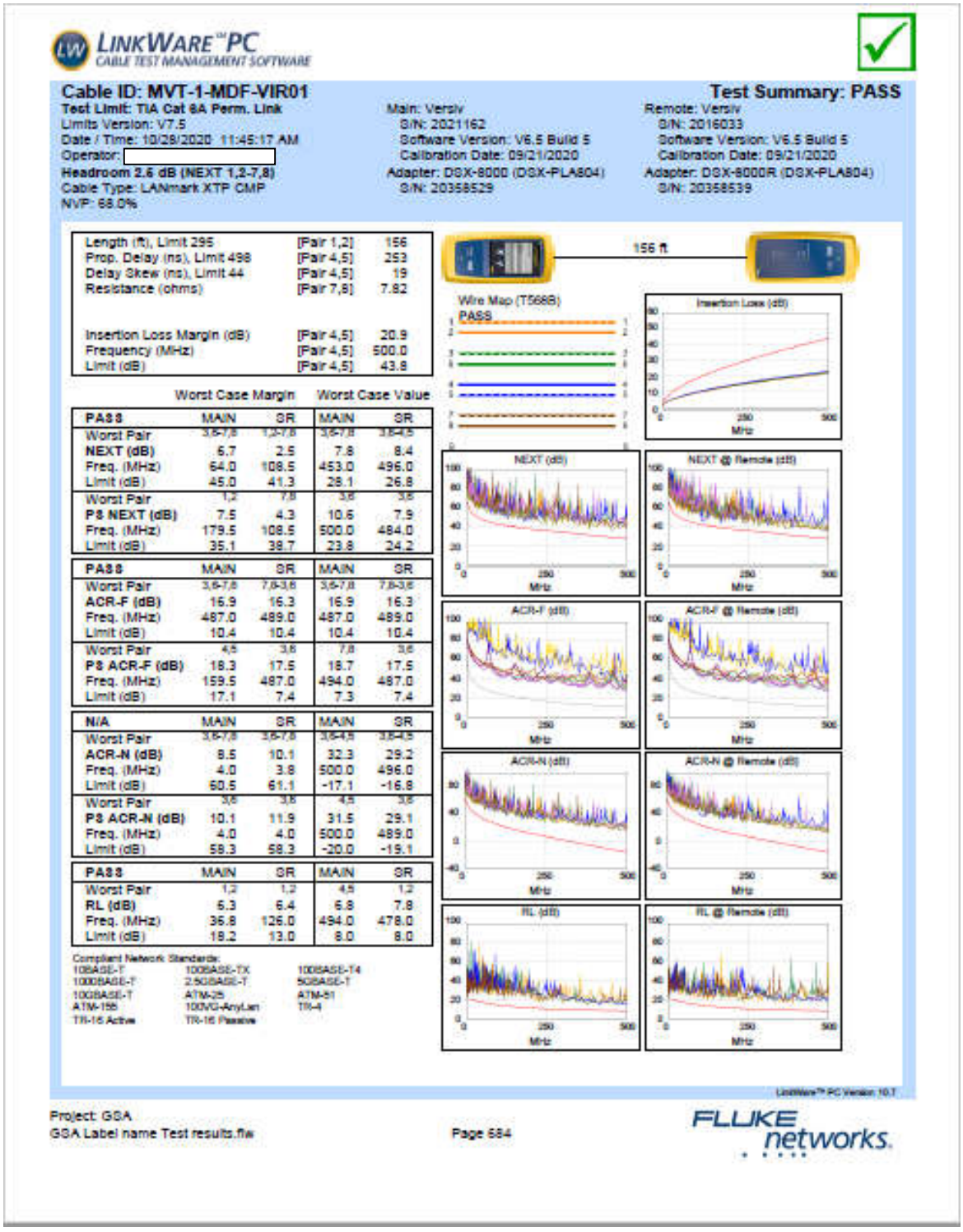

LINKWARE™ PC
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: MVT-1-MDF-VIR01
Test Limit: TIA Cat 6A Perm. Link
Limits Version: V7.5
Date / Time: 10/28/2020 11:45:17 AM
Operator:
Headroom 2.6 dB (NEXT 1,2-7,8)
Cable Type: LANmark XTP CMP
NVP: 68.0%

Main: Versiv
S/N: 2021162
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 20358529

Test Summary: PASS
Remote: Versiv
S/N: 2016033
Software Version: V6.5 Build 5
Calibration Date: 09/21/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 20358539

Length (ft), Limit 295	[Pair 1,2]	156
Prop. Delay (ns), Limit 498	[Pair 4,5]	253
Delay Skew (ns), Limit 44	[Pair 4,5]	19
Resistance (ohms)	[Pair 7,8]	7.82
Insertion Loss Margin (dB)	[Pair 4,5]	20.9
Frequency (MHz)	[Pair 4,5]	500.0
Limit (dB)	[Pair 4,5]	43.8

156 ft

Wire Map (T568B)
PASS

	Worst Case Margin		Worst Case Value	
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	1,2-7,8	3,6-7,8	3,6-4,5
NEXT (dB)	6.7	2.5	7.8	8.4
Freq. (MHz)	64.0	108.5	453.0	496.0
Limit (dB)	45.0	41.3	28.1	26.8
Worst Pair	1,2	7,8	3,6	3,6
PS NEXT (dB)	7.5	4.3	10.6	7.9
Freq. (MHz)	179.5	108.5	500.0	484.0
Limit (dB)	35.1	38.7	23.8	24.2
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	7,8-3,6	3,6-7,8	7,8-3,6
ACR-F (dB)	16.9	16.3	16.9	16.3
Freq. (MHz)	487.0	489.0	487.0	489.0
Limit (dB)	10.4	10.4	10.4	10.4
Worst Pair	4,5	3,6	7,8	3,6
PS ACR-F (dB)	18.3	17.5	18.7	17.5
Freq. (MHz)	159.5	487.0	494.0	487.0
Limit (dB)	17.1	7.4	7.3	7.4
N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-7,8	3,6-4,5	3,6-4,5
ACR-N (dB)	8.5	10.1	32.3	29.2
Freq. (MHz)	4.0	3.8	500.0	496.0
Limit (dB)	50.5	61.1	-17.1	-16.8
Worst Pair	3,6	3,6	4,5	3,6
PS ACR-N (dB)	10.1	11.9	31.5	29.1
Freq. (MHz)	4.0	4.0	500.0	489.0
Limit (dB)	58.3	58.3	-20.0	-19.1
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2	1,2	4,5	1,2
RL (dB)	6.3	6.4	6.8	7.8
Freq. (MHz)	36.8	126.0	494.0	478.0
Limit (dB)	18.2	13.0	8.0	8.0

Compliant Network Standards:
10BASE-T, 100BASE-TX, 1000BASE-T4, 1000BASE-T, 2.5GBASE-T, 5GBASE-T, 10GBASE-T, ATM-25, ATM-51, ATM-155, 100VG-AnyLan, TR-4, TR-16 Active, TR-16 Passive

Insertion Loss (dB)
NEXT (dB)
NEXT @ Remote (dB)
ACR-F (dB)
ACR-F @ Remote (dB)
ACR-N (dB)
ACR-N @ Remote (dB)
RL (dB)
RL @ Remote (dB)
MHz

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Project: GSA
GSA Label name Test results.flw

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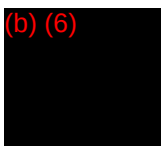
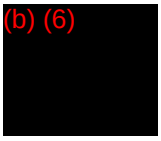
Lease No. GS-05P-LWI00685
Exhibit D – Security Requirements





SECURITY REQUIREMENTS - FACILITY SECURITY LEVEL II

THESE PARAGRAPHS CONTAIN ADDITIONAL SECURITY REQUIREMENTS, AND, UNLESS INDICATED OTHERWISE, ARE TO BE PRICED AS PART OF THE BUILDING SPECIFIC AMORTIZED CAPITAL (BSAC).
NOTE THAT ITEMS IDENTIFIED AS "SHELL *" REPRESENT A LESSOR'S OBLIGATIONS OR THE GOVERNMENT'S RIGHTS AND ARE NOT NECESSARILY ITEMS TO BE CONSTRUCTED.

DEFINITIONS:
Definitions are the same as those used in the Lease unless re-defined in these Security Requirements.

CRITICAL AREAS - The areas that house systems that if damaged or compromised could have significant adverse consequences for the facility, operation of the facility, or mission of the agency or its occupants and visitors. These areas may also be referred to as "limited access areas," "restricted areas," or "exclusionary zones." Critical areas do not necessarily have to be within Government-controlled space (e.g., generators, air handlers, electrical feeds which could be located outside Government-controlled space).

DESIGN-BASIS THREAT – The Design-Basis Threat (DBT) is the profile and estimate of the threats to a Government facility across a range of specific undesirable events, and serves as the basis for determining appropriate security standards. The Lessor's technical consultant(s) shall work in conjunction with the Government, including the Federal Protective Service (FPS), to apply the DBT to the post-award risk assessment. The risk assessment identifies recommended countermeasures and security design features that achieve the minimum baseline level of protection for a particular facility. The baseline level of protection may be further customized to address facility-specific conditions. The Lessor is responsible for providing countermeasure provisions outlined in this FSL document, as well as for additional items identified during the post-award risk assessment. Any additional countermeasures identified during this assessment shall be priced as BSAC.

I. FACILITY ENTRANCES, LOBBY, COMMON AREAS, NON-PUBLIC, AND UTILITY AREAS.

A. FACILITY ENTRANCES AND LOBBY

1. EMPLOYEE ACCESS CONTROL AT ENTRANCES (SHELL)

The Lessor shall provide key or Physical Access Control System (PACS) for the entrance to this building and to doors identified by the Government as employee entrance doors. All Government employees, under this lease, shall be allowed access to the leased space (including after-hours access).

B. SCREENING REQUIREMENTS

1. ACCOMODATION OF RETAIL/MIXED USE SPACE (SHELL)

The Lessor shall accommodate publicly accessible retail and mixed uses through such means as separating entryways.

C. COMMON AREAS, NON-PUBLIC, AND UTILITY AREAS.

1. PUBLIC RESTROOM ACCESS (SHELL)

The Government reserves the right to control access to public restrooms within Government controlled Space.

2. SECURING CRITICAL AREAS (SHELL)

The Lessor shall secure areas designated as Critical Areas to restrict access to authorized personnel only, and post signage accordingly:

a. At a minimum, the Lessor shall secure building common areas such as mechanical and janitorial areas, sprinkler rooms, electrical closets, telecommunications rooms, and janitor closets. Utility, mechanical, electrical, and telecom rooms shall be secured with high-security (UL437) locks. Keyed locks, PACS card reader, or similar security measures shall strictly control access to Critical Areas. Additional controls for access to keys, PACS, and key codes shall be strictly maintained.

b. Roofs with HVAC systems and access to interior space from the roof shall also be secured with high-security (UL437) locks. Roof access shall be strictly controlled through keyed locks, PACS card reader, or similar measures. Fire and life safety egress shall be carefully reviewed when restricting roof access.

c. In addition, Lessor shall protect the ventilation equipment and system controls from unauthorized access.

3. VISITOR ACCESS CONTROL (SHELL)

Entrances are open to the public during business hours. After hours, visitor entrances are secured, and have a means to verify the identity of persons requesting access prior to allowing entry into the Premises.

4. PUBLIC SPACE RESTRICTIONS WITH PRIMARY VERTICAL LOAD MEMBERS

The Government reserves the right to remove this countermeasure requirement, post-award, based on building-specific conditions. For measurement purposes, standoff shall be considered building support space and not ABOA.

a. **RESTRICT CONTACT FROM PUBLIC AREAS WITH PRIMARY VERTICAL LOAD MEMBERS**: For partitions separating public space from federal space, the Lessor shall use construction materials which have inherent ductility, and which are able to respond to load reversals. Alternatively, the Lessor can use a minimum standoff of at least 100 mm (4 inches).

(b) (6)

b. **RESTRICT CONTACT FROM MAIL AREA WITH PRIMARY VERTICAL LOAD MEMBERS:** In the partitions that separate public mail screening and receiving areas from federal tenants, the Lessor shall use construction materials which have inherent ductility, and which are able to respond to load reversals. Alternatively, the Lessor can use a minimum standoff of at least 150 mm (6 inches).

II. INTERIOR (GOVERNMENT SPACE)

A. IDENTITY VERIFICATION (SHELL)

The Government reserves the right to verify the identity of persons requesting access to the Government-controlled Space prior to allowing entry.

B. FORMAL KEY CONTROL PROGRAM (SHELL)

The Government reserves the right to implement a formal key control program. The Lessor shall have a means of allowing the electronic disabling of lost or stolen access media, if electronic media is used.

III. SITES AND EXTERIOR OF THE BUILDING

A. SIGNAGE

1. POSTING OF SIGNAGE IDENTIFYING THE SPACE AS GOVERNMENTAL (SHELL)

The Lessor shall not post sign(s) or otherwise identify the facility and parking areas as a Government, or specific Government tenant, occupied facility, including during construction, without written Government approval.

2. POSTING OF REGULATORY SIGNAGE (SHELL)

The Government may post or request the Lessor to post regulatory, statutory, sensitive areas and site-specific signage.

B. LANDSCAPING AND ENTRANCES

1. LANDSCAPING REQUIREMENTS (SHELL)

Landscaping shall be neatly trimmed to minimize the opportunity for concealment of individuals, packages/containers, and parking areas. If Landscaping exists, the Lessor shall provide trees, hedges, berms, or any combination of these to create buffer zones to separate public areas and other functions. Landscaping shall not obstruct the views of security guards and Video Surveillance System (VSS) cameras or interfere with lighting or Intrusion Detection System (IDS) equipment.

2. HAZMAT STORAGE (SHELL)
Where applicable, Lessor shall locate HAZMAT storage in a restricted area or storage container away from loading docks, entrances, and uncontrolled parking.

3. PLACEMENT OF RECEPTACLES, CONTAINERS, AND MAILBOXES (SHELL)
Trash receptacles, containers, mailboxes, FedEx-UPS boxes, vending machines, or other fixtures and/or features that could conceal packages, briefcases, or other portable containers shall be located away from building exterior and entry points.

C. PARKING

1. PUBLIC ACCESS TO GOVERNMENT PARKING AREAS (SHELL)
Lessor shall designate Government employee and visitor parking areas.

IV. SECURITY SYSTEMS

A. Security System Testing and Maintenance Criteria: The Lessor in consultation and coordination with a security provider, either internal or external, as determined by the Lease Contracting Officer, and the Government security representative shall implement a testing and preventive maintenance program for all security systems the Lessor has installed. Testing must be based on established, consistent, agency-specific protocols, to be determined at the time of design. All testing shall be documented. Operational performance testing shall be conducted annually and functional testing shall be conducted more frequently, as determined by the Government. Components which fail, either during testing or throughout the life of this lease shall be repaired or replaced by the Lessor within a reasonable timeframe as determined by the Government. Any critical component that becomes inoperable must be replaced or repaired by the Lessor within five business days. Critical components are those required to provide security (IDS, VSS, PACS, etc.) for a perimeter access point or critical area. "Replacement" may include implementing other temporary measures in instances where the replacement or repair is not achievable within the specified time frame (e.g. a temporary barrier to replace an inoperable pop-up vehicle barrier, etc.). Failure by the Lessor to provide sufficient replacement measures within the timeframe identified above may result in the Government providing guard service, the cost of which must be reimbursed by the Lessor.

B. VIDEO SURVEILLANCE SYSTEM

LESSOR PROVIDED DESIGN, INSTALLATION, AND MAINTENANCE
The lessor shall design, install, and maintain a Video Surveillance System (VSS) as described in this section. The VSS system will support the entry control system (at personnel entrances and exits to the space), with time lapse video recording and digital image storage, that will allow Government employees to view and communicate remotely with visitors before allowing access to the Space. As determined by the Government the VSS system shall provide unobstructed coverage of designated pedestrian entrances and exits. Technical review of the proposed system shall be coordinated with the Government security representative, at the direction of the Contracting Officer, prior to completion of the CD's, as well as prior to installation. VSS

system testing, and acceptance shall be conducted by the Government prior to occupancy. The VSS system shall comply with the Architectural Barriers Act, section F230.0. The Government will centrally monitor the VSS system. Government specifications are available from the Lease Contracting Officer. VSS system components which fail or require maintenance, or which fail during testing should be serviced in accordance with the Security System Maintenance Criteria listed above.

The Lessor shall comply with FAR 52.204-25: Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020). See https://www.acquisition.gov/far/part-52#FAR_52_204_25.

GOVERNMENT PROVIDED SCOPE AND PRODUCT, INSTALLATION, AND MAINTENANCE

The Government may provide and install an entry control system, with time lapse video recording and digital image storage, that will allow Government employees to view and communicate remotely with visitors before allowing access. This Video Surveillance System (VSS) shall provide the Government with unobstructed coverage, as determined by the Government, of designated pedestrian entrances and exits. The Lessor shall permit twenty-four-hour VSS coverage and recording, provided and operated by the Government. The Government will centrally monitor the VSS surveillance. Government specifications are available from the Contracting Officer.

After notice to proceed, the Lessor shall advise the Government of the appropriate time to install the equipment during the construction of the Space. The Lessor shall facilitate the installation by allowing access to electrical panels and other areas of the building as necessary. The Lessor's construction schedule shall reflect the installation of this equipment.

C. INTRUSION DETECTION SYSTEM

LESSOR PROVIDED DESIGN, INSTALLATION, AND MAINTENANCE

The Lessor shall design, install, and maintain an Intrusion Detection System (IDS) as described in this section. The Government requires an IDS, which will cover perimeter entry and exit doors, and operable ground-floor windows. Basic Security-in-Depth IDS components include: magnetic door switch(s), alarm system keypad, passive infrared sensor(s) (PIR), an alarm panel (to designated monitoring center) and appropriate communication method i.e. telephone and/or Internet connection, glass-break detector, magnetic window switches or shock sensors. Technical review of the proposed system shall be coordinated with the Government security representative, at the direction of the Lease Contracting Officer, prior to completion of the CDs, and prior to installation. System testing and acceptance shall be conducted by the Government prior to occupancy.

Basic Security-in-Depth IDS shall be connected to and monitored at a central station operated by the Department of Homeland Security Mega Center. Emergency notification lists shall be coordinated with the monitoring station to include all applicable Government and lessor points of contact, including law enforcement (Federal Protective Service and facility security force). Monitoring shall be designed to facilitate a real-time detection of an incident, and to coordinate an active response to an incident. The Lessor must complete the Mega Center Alarm Requirements (MAR) application process specified by the Government to meet the monitoring requirements for a functional IDS. The Government creates an FPS monitoring account

and works with the Lessor to complete the Mega Center Alarm Requirement (MAR) in conjunction with the installing security vendor. Components which fail or require maintenance, or which fail during testing shall be serviced in accordance with the Security System Maintenance Criteria listed above.

GOVERNMENT PROVIDED SCOPE AND PRODUCT, INSTALLATION, AND MAINTENANCE The Lessor shall permit installation of a perimeter Intrusion Detection System (IDS) to be operated by the Government. The Government shall provide and install an IDS on perimeter entry and exit doors, and operable ground-floor windows. Basic Security-in-Depth IDS— include: magnetic door switch(s), alarm system keypad, passive infrared sensor(s) (PIR), an alarm panel (to designated monitoring center) and appropriate communication method i.e. telephone and/or Internet connection, glass-break detector, magnetic window switches or shock sensors.

Basic Security-in-Depth IDS shall be connected and monitored at a central station. Emergency notification lists shall be coordinated with the monitoring station to include all applicable Government and Lessor points of contact, including law enforcement (Federal Protective Service and facility security force). Monitoring shall be designed to facilitate a real-time detection of an incident, and to coordinate an active response to an incident.

After notice to proceed, the Lessor shall advise the Government of the appropriate time to install the equipment during the construction of the Space. The Lessor shall facilitate the installation by allowing access to electrical panels and other areas of the building, as necessary. The Lessor's construction schedule shall reflect the installation of this equipment.

D. DURESS ALARM

LESSOR PROVIDED DESIGN, INSTALLATION, AND MAINTENANCE

The Lessor shall design, install, and maintain a duress alarm system. Technical review shall be coordinated with the Government security representative, at the direction of the Contracting Officer, prior to completion of the CDs, as well as prior to installation. System testing and acceptance shall be conducted by the Government prior to occupancy. This system shall comply with the Architectural Barriers Act, section F230.0.

The Lessor in consultation and coordination with the security provider and Government shall conduct security system performance testing annually. Testing must be based on established, consistent agency-specific protocols, documented and furnished to the Contracting Officer. Components which fail or require maintenance, or which fail during testing should be serviced in accordance with the Security System Maintenance Criteria listed above.

GOVERNMENT PROVIDED SCOPE, PRODUCT, INSTALLATION, AND MAINTENANCE

The Lessor shall permit installation of a duress alarm system to be provided and operated by the Government. The Government, in coordination with a security provider, either internal or external, as determined by the Contracting Officer, shall document and implement duress procedures for emergency situations.

After notice to proceed, the Lessor shall advise the Government of the appropriate time to install the equipment during the construction of the Space and shall facilitate the installation, including access to electrical panels and other areas of the building, as necessary. The Lessor's construction schedule shall reflect the installation of this equipment.

E. SECURITY SYSTEMS DESIGN

The Lessor, in consultation and coordination with security providers (internal or external) and the agency designated security representative, shall ensure at the time of system design, system construction, and throughout the term of the Lease, that alarm and PACS panel, VSS components, controllers, and cabling shall be secured from unauthorized physical and logical access.

V. STRUCTURE

NOTE: FOR ADDITIONAL BLAST RESISTANT MEASURES REQUIRED IN NEW LEASE CONSTRUCTION PROJECTS, REFER TO LEASE PARAGRAPH "SECURITY FOR NEW CONSTRUCTION".

A. WINDOWS

LOCK GROUND FLOOR WINDOWS

If a Government tenant occupies ground floor space in the Building, the Lessor shall provide a means to lock all operable, ground floor windows with secure latches. As part of BSAC, any operable, ground floor windows shall be monitored via IDS.

B. BUILDING SYSTEMS

1. EMERGENCY GENERATOR PROTECTION (T.I.)

If an emergency generator is required by the Government, the Lessor shall locate it, either pre-existing or installed as part of Tenant Improvements, in a secure area, protected from unauthorized access and vehicle ramming, if outdoors. The emergency generator and its fuel tank must be located at least 25 feet from loading docks, entrances, and parking areas. Alternatively, if the 25 foot distance cannot be achieved, Lessor shall protect utilities in accordance with the post-award DBT analysis through a combination of standoff, hardening, and venting methods.

2. SECURING AIR INTAKE GRILLES

Lessor shall secure all accessible air intake grills from tampering or removal. Whenever possible, locate outdoor air intakes at least 30 feet above grade, and preferably at roof level.

VI. OPERATIONS AND ADMINISTRATION

A. FACILITY SECURITY COMMITTEE (SHELL *)

The Lessor shall cooperate and work with the buildings Facility Security Committee (FSC) throughout the term of the Lease. The FSC is responsible for addressing facility-specific security issues and approving the implementation of security measures and practices. The FSC consists of representatives of all Federal tenants in the facility, the security organization, and the leasing department or agency.

B. ACCESS TO BUILDING INFORMATION (SHELL *)

Building Information—including mechanical, electrical, vertical transport, fire and life safety, security system plans and schematics, computer automation systems, and emergency operations procedures shall be strictly controlled. Such information shall be released to authorized personnel only, approved by the Government, by the development of an access list and controlled copy numbering. The Lease Contracting Officer may direct that the names and locations of -Government tenants not be disclosed in any publicly accessed document or record. If that is the case, the Government may request that such information not be posted in the building directory.

Lessor shall have emergency plans and associated documents readily available in the event of an emergency.

C. CONSTRUCTION SECURITY PLAN (SHELL)

The Lessor shall develop and implement a construction security plan. The plan should specify who is responsible for the security of the site during each phase of the project until final completion. The construction security plan shall describe in detail, how the Government's information, assets, equipment, and personnel will be protected during the construction process. (This shall include background checks, restrictions on accessibility, and escorts for the construction personnel). The required security measures will vary with the risk presented during the project. The Lessor shall also submit a security plan for all post-occupancy construction and alterations projects in the leased Space, throughout the term of this Lease.

VII. CYBERSECURITY (SHELL *)

A. Lessors are prohibited from connecting any portion of their building and access control systems (BACS) to any federally-owned or operated IT network. BACS include systems providing fire and life safety control, physical access control, building power and energy control, electronic surveillance, and automated HVAC, elevator, or building monitoring and control services (including IP addressable devices, application servers, or network switches).

B. In the event of a cybersecurity incident related to BACS, the Lessor shall initially assess the cyber incident, identify the impacts and risks to the Building and its occupants, and follow their organization's cyber and IT procedures and protocols related to containing and handling a cybersecurity incident. In addition, the Lessor shall immediately inform the Lease Contracting Officer's (LCO's) designated representative, i.e., the Lease Administration Manager (LAM), about cybersecurity incidents that impact a federal tenant's safety, security, or proper functioning.

C. Lessors are encouraged to put into place the following cyber protection measures to safeguard facilities and occupants:

1. Engineer and install BACS to comply with the Department of Homeland Security Industrial Control Systems Computer Emergency Response Team (DHS ICS-CERT) cyber security guidance and recommendations (https://ics-cert.us-cert.gov/Recommended-Practices).

2. Refer to the National Institute of Standards and Technology Cyber Security Framework (NIST-CSF) (https://www.nist.gov/cyberframework) and cybersecurity guidance in the DHS

Commercial Facilities Sector-Specific Plan (https://www.dhs.gov/publication/nipp-ssp-commercial-facilities-2015) for best practices to manage cyber risks.

3. Encourage vendors of BACS to secure these devices and software through the following:

   a. Develop and institute a proper Configuration Management Plan for the BACS devices and applications, so that the system can be supported.

   b. Safeguard sensitive data and/or login credentials through the use of strong encryption on devices and applications. This means using NIST- approved encryption algorithms, secure protocols (i.e., Transport Layer Security (TLS) 1.1, TLS 1.2, TLS 1.3) and Federal Information Processing Standard (FIPS) 140-2 validated modules.

   c. Disable unnecessary services in order to protect the system from unnecessary access and a potential exposure point by a malicious attacker. Examples include File Transfer Protocol-FTP (a protocol used for transferring files to a remote location) and Telnet (allowing a user to issue commands remotely). Additionally, use of protocols that transmit data in the clear (such as default ZigBee) should be avoided, in favor of protocols that are encrypted.

   d. Close unnecessary open ports to secure against unprivileged access.

   e. Monitor and free web applications and supporting servers of common vulnerabilities in web applications, such as those identified by the (Open Web Application Security Project (OWASP) Top 10 Project (https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project).

   f. Enforce Least Privilege, where proper permissions are enforced on a device or application so that a malicious attacker cannot gain access to all data. Enforcing Least Privilege will only allow users to access data they are allowed to see. Additional information can be found at https://www.beyondtrust.com/blog/what-is-least-privilege/.

   g. Protect against Insufficient User Access Auditing, where device or application does not have a mechanism to log/track activity by user. Enforce changing of factory default Username and Password to prevent unauthorized entry into the BACS system.

   h. Use updated antivirus software subscription at all times. Kaspersky-branded products or services, prohibited from use by the Federal Government, are not to be utilized.

   i. Conduct antivirus and spyware scans on a regular basis. Patching for workstations and server Operating System (OS), as well as vulnerability patching should follow standard industry best practices for software development life cycle (SDLC).

   j. Discontinue the use of end of life (EOL) systems and use only applications/systems that are supported by the manufacturer.

   k. Operating Systems must be supported by the vendor for security updates (e.g., do not use Windows Server 2003).

   l. Proposed standard installation, operation, maintenance, updates, and/or patching of software shall not alter the configuration settings from the approved United States Government Configuration Baseline (USGCB) or tenant agency guidance (if applicable).

m. Disallow the use of commercially-provided circuits to manage building systems and install building systems on a protected network, safeguarded by the enterprise firewalls in place. Workstations or servers running building monitor and control systems are not connected and visible on the public internet.

n. Systems should have proper system configuration hardening and align with Center for Internet Security (CIS) benchmarks or other industry recognized benchmarks. Additional information can be found at https://www.cisecurity.org/cis-benchmarks/.

Lease No. GS-05P-LWI00685
Exhibit E – GSA FORM 3517B General Clauses

LESSO (b) (6) OVERNMENT (b) (6)

GENERAL CLAUSES
(Acquisition of Leasehold Interests in Real Property)

CATEGORY	CLAUSE NO.	48 CFR REF.	CLAUSE TITLE
GENERAL	1		SUBLETTING AND ASSIGNMENT
	2	552.270-11	SUCCESSORS BOUND
	3	552.270-23	SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT
	4	552.270-24	STATEMENT OF LEASE
	5	552.270-25	SUBSTITUTION OF TENANT AGENCY
	6	552.270-26	NO WAIVER
	7		INTEGRATED AGREEMENT
	8	552.270-28	MUTUALITY OF OBLIGATION
PERFORMANCE	9		DELIVERY AND CONDITION
	10		DEFAULT BY LESSOR
	11	552.270-19	PROGRESSIVE OCCUPANCY
	12		MAINTENANCE OF THE PROPERTY, RIGHT TO INSPECT
	13		FIRE AND CASUALTY DAMAGE
	14		COMPLIANCE WITH APPLICABLE LAW
	15	552.270-12	ALTERATIONS
	16		ACCEPTANCE OF SPACE AND CERTIFICATE OF OCCUPANCY
PAYMENT	17	52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE
	18	552.270-31	PROMPT PAYMENT
	19	52.232-23	ASSIGNMENT OF CLAIMS
	20		PAYMENT
	21	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER—SYSTEM FOR AWARD MANAGEMENT
STANDARDS OF CONDUCT	22	52.203-13	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT
	23	552.270-32	COVENANT AGAINST CONTINGENT FEES
	24	52-203-7	ANTI-KICKBACK PROCEDURES
	25	52-223-6	DRUG-FREE WORKPLACE
	26	52.203-14	DISPLAY OF HOTLINE POSTER(S)
ADJUSTMENTS	27	552.270-30	PRICE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
	28	52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA
	29	552.270-13	PROPOSALS FOR ADJUSTMENT
	30		CHANGES
AUDITS	31	552.215-70	EXAMINATION OF RECORDS BY GSA
	32	52.215-2	AUDIT AND RECORDS—NEGOTIATION
DISPUTES	33	52.233-1	DISPUTES

LABOR STANDARDS	34	52.222-26	EQUAL OPPORTUNITY
	35	52.222-21	PROHIBITION OF SEGREGATED FACILITIES
	36	52.219-28	POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION
	37	52.222-35	EQUAL OPPORTUNITY FOR VETERANS
	38	52.222-36	EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES
	39	52.222-37	EMPLOYMENT REPORTS ON VETERANS
SUBCONTRACTING	40	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
	41	52.215-12	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA
	42	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS
	43	52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN
	44	52.219-16	LIQUIDATED DAMAGES—SUBCONTRACTING PLAN
	45	52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS
OTHER	46	52.204-25	PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
	47		INTENTIONALLY DELETED
	48	52.204-19	INCORPORATION BY REFERENCE OF REPRESENTATIONS AND CERTIFICATIONS

The information collection requirements contained in this solicitation/contract that are not required by regulation have been approved by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act and assigned the OMB Control No. 3090-0163.

GENERAL CLAUSES
(Acquisition of Leasehold Interests in Real Property)

1. SUBLETTING AND ASSIGNMENT (JAN 2011)

The Government may sublet any part of the premises but shall not be relieved from any obligations under this lease by reason of any such subletting. The Government may at any time assign this lease, and be relieved from all obligations to Lessor under this lease excepting only unpaid rent and other liabilities, if any, that have accrued to the date of said assignment. Any subletting or assignment shall be subject to prior written consent of Lessor, which shall not be unreasonably withheld.

2. 552.270-11 SUCCESSORS BOUND (SEP 1999)

This lease shall bind, and inure to the benefit of, the parties and their respective heirs, executors, administrators, successors, and assigns.

3. 552.270-23 SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT (SEP 1999)

(a) Lessor warrants that it holds such title to or other interest in the premises and other property as is necessary to the Government's access to the premises and full use and enjoyment thereof in accordance with the provisions of this lease. Government agrees, in consideration of the warranties and conditions set forth in this clause, that this lease is subject and subordinate to any and all recorded mortgages, deeds of trust and other liens now or hereafter existing or imposed upon the premises, and to any renewal, modification or extension thereof. It is the intention of the parties that this provision shall be self-operative and that no further instrument shall be required to effect the present or subsequent subordination of this lease. Government agrees, however, within twenty (20) business days next following the Contracting Officer's receipt of a written demand, to execute such instruments as Lessor may reasonably request to evidence further the subordination of this lease to any existing or future mortgage, deed of trust or other security interest pertaining to the premises, and to any water, sewer or access easement necessary or desirable to serve the premises or adjoining property owned in whole or in part by Lessor if such easement does not interfere with the full enjoyment of any right granted the Government under this lease.

(b) No such subordination, to either existing or future mortgages, deeds of trust or other lien or security instrument shall operate to affect adversely any right of the Government under this lease so long as the Government is not in default under this lease. Lessor will include in any future mortgage, deed of trust or other security instrument to which this lease becomes subordinate, or in a separate non-disturbance agreement, a provision to the foregoing effect. Lessor warrants that the holders of all notes or other obligations secured by existing mortgages, deeds of trust or other security instruments have consented to the provisions of this clause, and agrees to provide true copies of all such consents to the Contracting Officer promptly upon demand.

(c) In the event of any sale of the premises or any portion thereof by foreclosure of the lien of any such mortgage, deed of trust or other security instrument, or the giving of a deed in lieu of foreclosure, the Government will be deemed to have attorned to any purchaser, purchasers, transferee or transferees of the premises or any portion thereof and its or their successors and assigns, and any such purchasers and transferees will be deemed to have assumed all obligations of the Lessor under this lease, so as to establish direct privity of estate and contract between Government and such purchasers or transferees, with the same force, effect and relative priority in time and right as if the lease had initially been entered into between such purchasers or transferees and the Government; provided, further, that the Contracting Officer and such purchasers or transferees shall, with reasonable promptness following any such sale or deed delivery in lieu of foreclosure, execute all such revisions to this lease, or other writings, as shall be necessary to document the foregoing relationship.

(d) None of the foregoing provisions may be deemed or construed to imply a waiver of the Government's rights as a sovereign.

4. 552.270-24 STATEMENT OF LEASE (SEP 1999)

(a) The Contracting Officer will, within thirty (30) days next following the Contracting Officer's receipt of a joint written request from Lessor and a prospective lender or purchaser of the building, execute and deliver to Lessor a letter stating that the same is issued subject to the conditions stated in this clause and, if such is the case, that (1) the lease is in full force and effect; (2) the date to which the rent and other charges have been paid in advance, if any; and (3) whether any notice of default has been issued.

(b) Letters issued pursuant to this clause are subject to the following conditions:

(1) That they are based solely upon a reasonably diligent review of the Contracting Officer's lease file as of the date of issuance;

(2) That the Government shall not be held liable because of any defect in or condition of the premises or building;

(3) That the Contracting Officer does not warrant or represent that the premises or building comply with applicable Federal, State and local law; and

(4) That the Lessor, and each prospective lender and purchaser are deemed to have constructive notice of such facts as would be ascertainable by reasonable pre-purchase and pre-commitment inspection of the Premises and Building and by inquiry to appropriate Federal, State and local Government officials.

5. 552.270-25 SUBSTITUTION OF TENANT AGENCY (SEP 1999)

The Government may, at any time and from time to time, substitute any Government agency or agencies for the Government agency or agencies, if any, named in the lease.

6. 552.270-26 NO WAIVER (SEP 1999)

No failure by either party to insist upon the strict performance of any provision of this lease or to exercise any right or remedy consequent upon a breach thereof, and no acceptance of full or partial rent or other performance by either party during the continuance of any such breach shall constitute a waiver of any such breach of such provision.

7. INTEGRATED AGREEMENT (JUN 2012)

This Lease, upon execution, contains the entire agreement of the parties and no prior written or oral agreement, express or implied, shall be admissible to contradict the provisions of the Lease. Except as expressly attached to and made a part of the Lease, neither the Request for Lease Proposals nor any pre-award communications by either party shall be incorporated in the Lease.

8. 552.270-28 MUTUALITY OF OBLIGATION (SEP 1999)

The obligations and covenants of the Lessor, and the Government's obligation to pay rent and other Government obligations and covenants, arising under or related to this Lease, are interdependent. The Government may, upon issuance of and delivery to Lessor of a final decision asserting a claim against Lessor, set off such claim, in whole or in part, as against any payment or payments then or thereafter due the Lessor under this lease. No setoff pursuant to this clause shall constitute a breach by the Government of this lease.

9. DELIVERY AND CONDITION (JAN 2011)

(a) Unless the Government elects to have the space occupied in increments, the space must be delivered ready for occupancy as a complete unit.

(b) The Government may elect to accept the Space notwithstanding the Lessor's failure to deliver the Space substantially complete; if the Government so elects, it may reduce the rent payments.

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10. DEFAULT BY LESSOR (APR 2012)

(a) The following conditions shall constitute default by the Lessor, and shall give rise to the following rights and remedies for the Government:

(1) Prior to Acceptance of the Premises. Failure by the Lessor to diligently perform all obligations required for Acceptance of the Space within the times specified, without excuse, shall constitute a default by the Lessor. Subject to provision of notice of default to the Lessor, and provision of a reasonable opportunity for the Lessor to cure its default, the Government may terminate the Lease on account of the Lessor's default.

(2) After Acceptance of the Premises. Failure by the Lessor to perform any service, to provide any item, or satisfy any requirement of this Lease, without excuse, shall constitute a default by the Lessor. Subject to provision of notice of default to the Lessor, and provision of a reasonable opportunity for the Lessor to cure its default, the Government may perform the service, provide the item, or obtain satisfaction of the requirement by its own employees or contractors. If the Government elects to take such action, the Government may deduct from rental payments its costs incurred in connection with taking the action. Alternatively, the Government may reduce the rent by an amount reasonably calculated to approximate the cost or value of the service not performed, item not provided, or requirement not satisfied, such reduction effective as of the date of the commencement of the default condition.

(3) Grounds for Termination. The Government may terminate the Lease if:

(i) The Lessor's default persists notwithstanding provision of notice and reasonable opportunity to cure by the Government, or

(ii) The Lessor fails to take such actions as are necessary to prevent the recurrence of default conditions,

and such conditions (i) or (ii) substantially impair the safe and healthful occupancy of the Premises, or render the Space unusable for its intended purposes.

(4) Excuse. Failure by the Lessor to timely deliver the Space or perform any service, provide any item, or satisfy any requirement of this Lease shall not be excused if its failure in performance arises from:

(i) Circumstances within the Lessor's control;

(ii) Circumstances about which the Lessor had actual or constructive knowledge prior to the Lease Award Date that could reasonably be expected to affect the Lessor's capability to perform, regardless of the Government's knowledge of such matters;

(iii) The condition of the Property;

(iv) The acts or omissions of the Lessor, its employees, agents or contractors; or

(v) The Lessor's inability to obtain sufficient financial resources to perform its obligations.

(5) The rights and remedies specified in this clause are in addition to any and all remedies to which the Government may be entitled as a matter of law.

11. 552.270-19 PROGRESSIVE OCCUPANCY (SEP 1999)

The Government shall have the right to elect to occupy the space in partial increments prior to the substantial completion of the entire leased premises, and the Lessor agrees to schedule its work so as to deliver the space incrementally as elected by the Government. The Government shall pay rent commencing with the first business day following substantial completion of the entire leased premise unless the Government has elected to occupy the leased premises incrementally. In case of incremental occupancy, the Government shall pay rent pro rata upon the first business day following substantial

completion of each incremental unit. Rental payments shall become due on the first workday of the month following the month in which an increment of space is substantially complete, except that should an increment of space be substantially completed after the fifteenth day of the month, the payment due date will be the first workday of the second month following the month in which it was substantially complete. The commencement date of the firm lease term will be a composite determined from all rent commencement dates.

12. MAINTENANCE OF THE PROPERTY, RIGHT TO INSPECT (APR 2015)

The Lessor shall maintain the Property, including the building, building systems, and all equipment, fixtures, and appurtenances furnished by the Lessor under this Lease, in good repair and tenantable condition so that they are suitable in appearance and capable of supplying such heat, air conditioning, light, ventilation, safety systems, access and other things to the premises, without reasonably preventable or recurring disruption, as is required for the Government's access to, occupancy, possession, use and enjoyment of the premises as provided in this lease. For the purpose of so maintaining the premises, the Lessor may at reasonable times enter the premises with the approval of the authorized Government representative in charge. Upon request of the Lease Contracting Officer (LCO), the Lessor shall provide written documentation that building systems have been properly maintained, tested, and are operational within manufacturer's warranted operating standards. The Lessor shall maintain the Premises in a safe and healthful condition according to applicable OSHA standards and all other requirements of this Lease, including standards governing indoor air quality, existence of mold and other biological hazards, presence of hazardous materials, etc. The Government shall have the right, at any time after the Lease Award Date and during the term of the Lease, to inspect all areas of the Property to which access is necessary for the purpose of determining the Lessor's compliance with this clause.

13. FIRE AND CASUALTY DAMAGE (JUN 2016)

If the building in which the Premises are located is totally destroyed or damaged by fire or other casualty, this Lease shall immediately terminate. If the building in which the Premises are located are only partially destroyed or damaged, so as to render the Premises untenantable, or not usable for their intended purpose, the Lessor shall have the option to elect to repair and restore the Premises or terminate the Lease. The Lessor shall be permitted a reasonable amount of time, not to exceed **270 days** from the event of destruction or damage, to repair or restore the Premises, provided that the Lessor submits to the Government a reasonable schedule for repair of the Premises within **60 days** of the event of destruction or damage. If the Lessor fails to timely submit a reasonable schedule for completing the work, the Government may elect to terminate the Lease effective as of the date of the event of destruction or damage. If the Lessor elects to repair or restore the Premises, but fails to repair or restore the Premises within **270 days** from the event of destruction or damage, or fails to diligently pursue such repairs or restoration so as to render timely completion commercially impracticable, the Government may terminate the Lease effective as of the date of the destruction or damage. During the time that the Premises are unoccupied, rent shall be abated. Termination of the Lease by either party under this clause shall not give rise to liability for either party.

Nothing in this lease shall be construed as relieving Lessor from liability for damage to, or destruction of, property of the United States of America caused by the willful or negligent act or omission of Lessor.

14. COMPLIANCE WITH APPLICABLE LAW (JAN 2011)

Lessor shall comply with all Federal, state and local laws applicable to its ownership and leasing of the Property, including, without limitation, laws applicable to the construction, ownership, alteration or operation of all buildings, structures, and facilities located thereon, and obtain all necessary permits, licenses and similar items at its own expense. The Government will comply with all Federal, State and local laws applicable to and enforceable against it as a tenant under this lease, provided that nothing in this Lease shall be construed as a waiver of the sovereign immunity of the Government. This Lease shall be governed by Federal law.

15. 552.270-12 ALTERATIONS (SEP 1999)

The Government shall have the right during the existence of this lease to make alterations, attach fixtures, and erect structures or signs in or upon the premises hereby leased, which fixtures, additions or structures so placed in, on, upon, or attached to the said premises shall be and remain the property of the Government and may be removed or otherwise disposed of by the Government. If the lease contemplates that the Government is the sole occupant of the building, for

purposes of this clause, the leased premises include the land on which the building is sited and the building itself. Otherwise, the Government shall have the right to tie into or make any physical connection with any structure located on the property as is reasonably necessary for appropriate utilization of the leased space.

16. ACCEPTANCE OF SPACE AND CERTIFICATE OF OCCUPANCY (APR 2015)

(a) Ten (10) working days prior to the completion of the Space, the Lessor shall issue written notice to the Government to schedule the inspection of the Space for acceptance. The Government shall accept the Space only if the construction of building shell and TIs conforming to this Lease and the approved DIDs is substantially complete, and a Certificate of Occupancy has been issued as set forth below.

(b) The Space shall be considered substantially complete only if the Space may be used for its intended purpose and completion of remaining work will not unreasonably interfere with the Government's enjoyment of the Space. Acceptance shall be final and binding upon the Government with respect to conformance of the completed TIs to the approved DIDs, with the exception of items identified on a punchlist generated as a result of the inspection, concealed conditions, latent defects, or fraud, but shall not relieve the Lessor of any other Lease requirements.

(c) The Lessor shall provide a valid Certificate of Occupancy, issued by the local jurisdiction, for the intended use of the Government. If the local jurisdiction does not issue Certificates of Occupancy or if the Certificate of Occupancy is not available, the Lessor may satisfy this condition by providing a report prepared by a licensed fire protection engineer that indicates that the Space and Building are compliant with all applicable local codes and ordinances and all fire protection and life safety-related requirements of this Lease to ensure an acceptable level of safety is provided. Under such circumstances, the Government shall only accept the Space without a Certificate of Occupancy if a licensed fire protection engineer determines that the offered space is compliant with all applicable local codes and ordinances and fire protection and life safety-related requirements of this Lease.

17. 52.204-13 SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (OCT 2018)

This clause is incorporated by reference.

18. 552.270-31 PROMPT PAYMENT (JUN 2011)

The Government will make payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or an electronic funds transfer is made. All days referred to in this clause are calendar days, unless otherwise specified.

(a) *Payment due date—*

(1) *Rental payments.* Rent shall be paid monthly in arrears and will be due on the first workday of each month, and only as provided for by the lease.

(i) When the date for commencement of rent falls on the 15th day of the month or earlier, the initial monthly rental payment under this contract shall become due on the first workday of the month following the month in which the commencement of the rent is effective.

(ii) When the date for commencement of rent falls after the 15th day of the month, the initial monthly rental payment under this contract shall become due on the first workday of the second month following the month in which the commencement of the rent is effective.

(2) *Other payments.* The due date for making payments other than rent shall be the later of the following two events:

(i) The 30th day after the designated billing office has received a proper invoice from the Contractor.

(ii) The 30th day after Government acceptance of the work or service. However, if the designated billing office fails to annotate the invoice with the actual date of receipt, the invoice payment due date shall be deemed to be the 30th day after the Contractor's invoice is dated, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(b) *Invoice and inspection requirements for payments other than rent.*

(1) The Contractor shall prepare and submit an invoice to the designated billing office after completion of the work. A proper invoice shall include the following items:

(i) Name and address of the Contractor.

(ii) Invoice date.

(iii) Lease number.

(iv) Government's order number or other authorization.

(v) Description, price, and quantity of work or services delivered.

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the remittance address in the lease or the order).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(2) The Government will inspect and determine the acceptability of the work performed or services delivered within seven days after the receipt of a proper invoice or notification of completion of the work or services unless a different period is specified at the time the order is placed. If actual acceptance occurs later, for the purpose of determining the payment due date and calculation of interest, acceptance will be deemed to occur on the last day of the seven day inspection period. If the work or service is rejected for failure to conform to the technical requirements of the contract, the seven days will be counted beginning with receipt of a new invoice or notification. In either case, the Contractor is not entitled to any payment or interest unless actual acceptance by the Government occurs.

(c) *Interest Penalty.*

(1) An interest penalty shall be paid automatically by the Government, without request from the Contractor, if payment is not made by the due date.

(2) The interest penalty shall be at the rate established by the Secretary of the Treasury under Section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date. This rate is referred to as the ''Renegotiation Board Interest Rate,'' and it is published in the **Federal Register** semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the payment amount approved by the Government and be compounded in 30-day increments inclusive from the first day after the due date through the payment date.

(3) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233–1, Disputes, or for more than one year. Interest penalties of less than $1.00 need not be paid.

(4) Interest penalties are not required on payment delays due to disagreement between the Government and Contractor over the payment amount or other issues involving contract compliance or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(d) *Overpayments.* If the Lessor becomes aware of a duplicate payment or that the Government has otherwise overpaid on a payment, the Contractor shall—

(1) Return the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—

(i) Circumstances of the overpayment (*e.g.,* duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(ii) Affected lease number; (iii) Affected lease line item or sub-line item, if applicable; and

(iii) Lessor point of contact.

(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

19. 52.232-23 ASSIGNMENT OF CLAIMS (MAY 2014)

(Applicable to leases over the micro-purchase threshold.)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 6305 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

20. PAYMENT (MAY 2011)

(a) When space is offered and accepted, the amount of American National Standards Institute/Building Owners and Managers Association Office Area (ABOA) square footage delivered will be confirmed by:

(1) The Government's measurement of plans submitted by the successful Offeror as approved by the Government, and an inspection of the space to verify that the delivered space is in conformance with such plans or

(2) A mutual on-site measurement of the space, if the Contracting Officer determines that it is necessary.

(b) Payment will not be made for space which is in excess of the amount of ABOA square footage stated in the lease.

(c) If it is determined that the amount of ABOA square footage actually delivered is less than the amount agreed to in the lease, the lease will be modified to reflect the amount of ABOA space delivered and the annual rental will be adjusted as follows:

ABOA square feet not delivered multiplied by one plus the common area factor (CAF), multiplied by the rate per rentable square foot (RSF). That is: (1+CAF) x Rate per RSF = Reduction in Annual Rent

21. 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—SYSTEM FOR AWARD MANAGEMENT (OCT 2018)

This clause is incorporated by reference.

22. 52.203-13 Contractor Code of Business Ethics and Conduct (JUN 2020)

(Applicable to leases over $5.5 million total contract value and performance period is 120 days or more.)

This clause is incorporated by reference.

23. 552.270-32 COVENANT AGAINST CONTINGENT FEES (JUN 2011)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of the contingent fee.

(b) *Bona fide agency,* as used in this clause, means an established commercial or selling agency (including licensed real estate agents or brokers), maintained by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

(1) Bona fide employee, as used in this clause, means a person, employed by a Contractor and subject to the Contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

(2) Contingent fee, as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

(3) Improper influence, as used in this clause, means any influence that induces or tends to induce a *Government* employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

24. 52.203-7 ANTI-KICKBACK PROCEDURES (JUN 2020)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)
This clause is incorporated by reference.

25. 52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(Applicable to leases over the Simplified Lease Acquisition Threshold, as well as to leases of any value awarded to an individual.)
This clause is incorporated by reference.

26. 52.203-14 DISPLAY OF HOTLINE POSTER(S) (JUN 2020)

(Applicable to leases over $5.5 Million total contract value and performance period is 120 days or more.)

(a) *Definition.*

United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) *Display of fraud hotline poster(s).* Except as provided in paragraph (c

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(1) During contract performance in the United States, the Contractor shall prominently display in common work areas within business segments performing work under this contract and at contract work sites-

(i) Any agency fraud hotline poster or Department of Homeland Security (DHS) fraud hotline poster identified in paragraph (b)(3) of this clause; and

(ii) Any DHS fraud hotline poster subsequently identified by the Contracting Officer.

(2) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(3) Any required posters may be obtained as follows:

Poster(s)	***Obtain from***
_____	_____
_____	_____

(*Contracting Officer shall insert—*

(i) Appropriate agency name(s) and/or title of applicable Department of Homeland Security fraud hotline poster); and

(ii) The website(s) or other contact information for obtaining the poster(s).)

(c) If the Contractor has implemented a business ethics and conduct awareness program, including a reporting mechanism, such as a hotline poster, then the Contractor need not display any agency fraud hotline posters as required in paragraph (b) of this clause, other than any required DHS posters.

(d) *Subcontracts.* The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Federal Acquisition Regulation 3.1004(b)(1) on the date of subcontract award, except when the subcontract—

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

27. 552.270-30 PRICE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JUN 2011)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)

(a) If the head of the contracting activity (HCA) or his or her designee determines that there was a violation of subsection 27(a) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in the Federal Acquisition Regulation, the Government, at its election, may—

(1) Reduce the monthly rental under this lease by five percent of the amount of the rental for each month of the remaining term of the lease, including any option periods, and recover five percent of the rental already paid;

(2) Reduce payments for alterations not included in monthly rental payments by five percent of the amount of the alterations agreement; or

(3) Reduce the payments for violations by a Lessor's subcontractor by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was placed.

(b) Prior to making a determination as set forth above, the HCA or designee shall provide to the Lessor a written notice of the action being considered and the basis thereof. The Lessor shall have a period determined by the agency head or designee, but not less than 30 calendar days after receipt of such notice, to submit in person, in writing, or through a representative, information and argument in opposition to the proposed reduction. The agency head or designee may, upon good cause shown, determine to deduct less than the above amounts from payments.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this lease.

28. 52.215-10 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (AUG 2011)

(Applicable when cost or pricing data are required for work or services over $750,000.)
This clause is incorporated by reference.

29. 552.270-13 PROPOSALS FOR ADJUSTMENT (OCT 2016)

This clause is incorporated by reference.

30. CHANGES (MAR 2013)

(a) The LCO may at any time, by written order, direct changes to the Tenant Improvements within the Space, Building Security Requirements, or the services required under the Lease.

(b) If any such change causes an increase or decrease in Lessor's costs or time required for performance of its obligations under this Lease, whether or not changed by the order, the Lessor shall be entitled to an amendment to the Lease providing for one or more of the following:

(1) An adjustment of the delivery date;

(2) An equitable adjustment in the rental rate;

(3) A lump sum equitable adjustment; or

(4) A change to the operating cost base, if applicable.

(c) The Lessor shall assert its right to an amendment under this clause within 30 days from the date of receipt of the change order and shall submit a proposal for adjustment. Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, the pendency of an adjustment or existence of a dispute shall not excuse the Lessor from proceeding with the change as directed.

(d) Absent a written change order from the LCO, or from a Government official to whom the LCO has explicitly and in writing delegated the authority to direct changes, the Government shall not be liable to Lessor under this clause.

31. 552.215-70 EXAMINATION OF RECORDS BY GSA (JUN 2016)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)
This clause is incorporated by reference.

32. 52.215-2 AUDIT AND RECORDS—NEGOTIATION (JUN 2020)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)
This clause is incorporated by reference.

33. 52.233-1 DISPUTES (MAY 2014)

This clause is incorporated by reference.

34. 52.222-26 EQUAL OPPORTUNITY (SEP 2016)

This clause is incorporated by reference.

35. 52.222-21 PROHIBITION OF SEGREGATED FACILITIES (APR 2015)

This clause is incorporated by reference.

36. 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (SEP 2021)

(Applicable to leases exceeding the micro-purchase threshold.)
This clause is incorporated by reference.

37. 52.222-35 EQUAL OPPORTUNITY FOR VETERANS (JUN 2020)

(Applicable to leases $150,000 or more, total contract value.)

(a) *Definitions*. As used in this clause-

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at Federal Acquisition Regulation (FAR) 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts valued at or above the threshold specified in FAR 22.1303(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

38. 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUN 2020)

(Applicable to leases over $15,000 total contract value.)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of the threshold specified in Federal Acquisition Regulation (FAR) 22.1408(a) on the date of subcontract award, unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

39. 52.222-37 EMPLOYMENT REPORTS ON VETERANS (JUN 2020)

(Applicable to leases $150,000 or more, total contract value.)
This clause is incorporated by reference.

40. 52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUN 2020)

(Applicable to leases over $35,000 total contract value.)

This clause is incorporated by reference.

41. 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA (JUN 2020)

(Applicable if over $750,000 total contract value.)

This clause is incorporated by reference.

42. 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2018)

(Applicable to leases over the Simplified Lease Acquisition Threshold.)
This clause is incorporated by reference.

43. 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (SEP 2021) ALTERNATE III (JUN 2020)

(Applicable to leases over $750,000 total contract value.)
This clause is incorporated by reference.

44. 52.219-16 LIQUIDATED DAMAGES—SUBCONTRACTING PLAN (SEP 2021)

(Applicable to leases over $750,000 total contract value.)
This clause is incorporated by reference.

45. 52.204-10 REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUN 2020)

(Applicable if over $30,000 total contract value.)
This clause is incorporated by reference.

46. 52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (AUG 2020)

(a) *Definitions.* As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (*e.g.*, connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (*e.g.*, fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means–

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);

(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);

(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means–

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (*e.g.*, connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (*e.g.*, voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) *Prohibition*. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.

(c) *Exceptions.* This clause does not prohibit contractors from providing—

(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) Reporting requirement. (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause

(i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts.* The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

47. *INTENTIONALLY DELETED*

48. 52.204-19 INCORPORATION BY REFERENCE OF REPRESENTATIONS AND CERTIFICATIONS (DEC 2014)

This clause is incorporated by reference.

Lease No. GS-05P-LWI00685
Exhibit F – GSAR Clause
552.270-34

(b) (6)

(b) (6)

552.270-34 Access Limitations for High-Security Leased Space.

ACCESS LIMITATIONS FOR HIGH-SECURITY LEASED SPACE (JUN 2021)

(a) The Lessor, including representatives of the Lessor's property management company responsible for operation and maintenance of the leased space, shall not—

(1) Maintain access to the leased space; or

(2) Have access to the leased space without prior approval of the authorized Government representative.

(b) Access to the leased space or any property or information located within that Space will only be granted by the Government upon determining that such access is consistent with the Government's mission and responsibilities.

(c) Written procedures governing access to the leased space in the event of emergencies shall be documented as part of the Government's Occupant Emergency Plan, to be signed by both the Government and the Lessor.

(End of clause)

Lease No. GS-05P-LWI00685
Exhibit G – FAR 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment

LESSOR (b) (6) GOVERNMENT (b) (6)

Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment

See instructions within the representation regarding whether or not completion of this form is required If required, complete appropriate boxes, sign the form, and return form, along with any other required disclosure information, to LCO or his/her designee.
NOTE: The "Offeror," as used on this form, is the owner of the property offered, not an individual or agent representing the owner.

52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the Offeror has represented that it "does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument" in the provision at 52.204-26, Covered Telecommunications Equipment or Services—Representation, or in paragraph (v) of the provision at 52.212-3, Offeror Representations and Certifications-Commercial Items.

(a) *Definitions.* As used in this provision—

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) *Prohibition*.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that

uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) *Procedures.* The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".

(d) *Representation.* The Offeror represents that—

(1) It □ will, x □ will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds "will" in paragraph (d)(1) of this section; and

(2) After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that—

It □ does, x □ does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds "does" in paragraph (d)(2) of this section.

(e) *Disclosures.* (1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded "will" in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii) For covered services—

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded "does" in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services—

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(End of provision)

OFFEROR OR LEGALLY AUTHORIZED REPRESENTATIVE	NAME, ADDRESS (INCLUDING ZIP CODE)	TELEPHONE NUMBER
	Richard Recny Time Equities, Inc. 55 Fifth Avenue, 15th Floor New York, New York 10003	(b) (6)
	DocuSigned by: (b) (6)	3/10/2022 Date

Lease No. GS-05P-LWI00685
Exhibit H – GSAR Representation
Clause 552.270-33

Foreign Ownership and Financing Representation (Acquisitions of Leasehold Interests in Real Property)	Request for Lease Proposals Number 9WI2181	Dated 3/10/2022

Complete appropriate boxes, sign the form, and return to LCO.
The Offeror makes the following additional Representations. NOTE: The "Offeror," as used on this form, is the owner of the property offered, not an individual or agent representing the owner.

FOREIGN OWNERSHIP AND FINANCING (APR 2018)

(a) Offeror represents that the ownership of the offered Building

[ ] has a foreign person, foreign-owned entity, or foreign government involved in the ownership structure.

If checked, enter country: _____

[x] does not have a foreign person, foreign-owned entity, or foreign government involved in the ownership structure

(b) Offeror represents that the financing of the offered Premises, including, but not limited to, construction and permanent loans:

[ ] has a foreign person, foreign-owned entity, or foreign government involved in the financing structure

If checked, enter country: _____

[X] does not have a foreign person, foreign-owned entity, or foreign government involved in the financing structure.

OFFEROR OR LEGALLY AUTHORIZED REPRESENTATIVE	NAME, ADDRESS (INCLUDING ZIP CODE)	TELEPHONE NUMBER
	Richard Recny Time Equities, Inc. 55 Fifth Avenue, 15th Floor New York, New York 10003 (b) (6) _____	(b) (6) 3/10/2022 Date

LESSOR (b) (6) _ GOVERNMENT (b) (6)

(b) (6)

[redacted]

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	**Status**	**Timestamp**
Agent Delivery Events	**Status**	**Timestamp**
Intermediary Delivery Events	**Status**	**Timestamp**
Certified Delivery Events	**Status**	**Timestamp**
Carbon Copy Events	**Status**	**Timestamp**
Witness Events	**Signature**	**Timestamp**
Notary Events	**Signature**	**Timestamp**
Envelope Summary Events	**Status**	**Timestamps**
Envelope Sent	Hashed/Encrypted	3/9/2022 11:05:16 PM
Certified Delivered	Security Checked	3/11/2022 2:51:44 PM
Signing Complete	Security Checked	3/11/2022 3:43:28 PM
Completed	Security Checked	3/11/2022 3:43:28 PM
Payment Events	**Status**	**Timestamps**
Electronic Record and Signature Disclosure		

ESIGN DISCLOSURES AND CONSENT

It is required by law to provide you with certain disclosures and information about the products, services or accounts you may receive or access in connection with your relationship with us ('Required Information'). With your consent, we can deliver Required Information to you by a) displaying or delivering the Required Information electronically; and b) requesting that you print or download the Required Information and retain it for your records.

This notice contains important information that you are entitled to receive before you consent to electronic delivery of Required Information. Your consent also permits the general use of electronic records and electronic signatures in connection with the Required Information.

In accordance with the Electronic Signatures in Global and National Commerce Act (E-Sign Act), I recognize that my eSignature (Electronic or Digital Signature) shall be given the same legal status as a signature made with a pen. I further recognize that the eSignature may not be denied legal effect, validity, or enforceability solely because it is in electronic form. I hereby consent to the use of eSignature.

After you have read this information, if you agree to receive Required Information from us electronically, and if you agree to the general use of electronic records and electronic signatures in connection with our relationship, please click the 'I ACCEPT' button below.

Statement of electronic disclosures:

You may request to receive Required Information on paper, but if you do not consent to electronic delivery of Required Information, we cannot proceed with the acceptance and processing to create a relationship with you in connection to the products, services or account.

If you consent to electronic delivery of Required Information, you may withdraw that consent at any time. However, if you withdraw your consent we will not be able to continue processing to create a relationship with you in connection to the products, services or account.

If you consent to electronic disclosures, that consent applies to all Required Information we give you or receive from you in connection with our relationship and the associated notices, disclosures, and other documents.

You agree to print out or download Required Information when we advise you to do so and keep it for your records. If you are unable to print or download any Required Information, you may call us and request paper copies. If you need to update your e-mail address or other contact information with us, you may do so by calling us and requesting the necessary updates.

If you wish to withdraw your consent to electronic disclosures, you may do so by calling us and requesting withdrawal of consent. After consenting to receive and deliver Required Information electronically, you may request a paper copy of the Required Information by calling us.

If you do not have the required software and/or hardware, or if you do not wish to use electronic records and signatures for any other reason, you can request paper copies of the Required Information to be sent to you by calling us.

Your consent does not mean that we must provide the Required Information electronically. We may to, at our option, deliver Required Information on paper. We may also require that certain communications from you be delivered to us on paper at a specified address.

I have read the information about the use of electronic records, disclosures, notices, and e--mail, and consent to the use of electronic records for the delivery of Required Information in connection with our relationship. I have been able to view this information using my computer and software. I have an account with an internet service provider, and I am able to send e-mail and receive e-mail with hyperlinks to websites and attached files. I also consent to the use of electronic records and electronic signatures in place of written documents and handwritten signatures.